U.S. Department of Agriculture

2016 Strategic Sustainability Performance Plan

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June 30, 2016

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U.S. Department of Agriculture Policy Statement

The U.S. Department of Agriculture (USDA) strives towards a net zero environmental footprint, through sustainable operations and clean energy practices, leading the way in climate change mitigation, adaptation and resilience efforts. USDA complies with energy, environmental and sustainability statutes, regulations, and Executive Orders. In striving for a net zero environmental footprint, the department acts to:

- Use sustainable locations and multimodal work and commuting practices that enable offices to meet mission while greatly reducing our greenhouse gas emissions;
- Reduce our reliance on nonrenewable energy by increasing energy conservation, improving efficiency, and promoting clean renewable energy projects and programs;
- Promote water conservation, identifying water inefficiencies and implementing water conservation and efficiency projects;
- Use performance contracting to deploy life-cycle cost effective energy efficiency, clean energy and water conservation measures.
- Promote greening the Federal supply chain and operations;
- Implement sustainable acquisition practices for recycled content, energy and water efficient, non-toxic or less toxic, biobased, and environmentally preferable products and services;
- Pursue waste management strategies that include reducing, reusing, and recycling;
- Promote sound environmental practices for increasing data center efficiency as well as for buying, using, re-purposing, refurbishing, and recycling electronic products;
- Support green transportation/travel practices that reduce harmful emissions, increasing operational and fuel efficiency, and reducing nonrenewable fuel use;
- Plan, design, construct, and operate sustainable facilities and green infrastructure;
- Promote design and renovation of government facilities to be resilient in the face of climate change, and to reach net zero energy, water, and waste;
- Continue to implement, maintain, and deploy existing and new environmental management systems at appropriate organizational levels; and
- Engage USDA employees, stakeholders, and the public in net zero actions.

To enhance the nation's climate resilience, USDA collaborates with other Federal agencies and local and private entities. Actions include identifying the effects of climate change and integrating climate change adaptation strategies into operations policies and programs. USDA, on behalf of the agriculture and forestry sector, helps to keep the land healthy, productive, and resilient for future generations. The USDA climate change mitigation framework provides resources and solutions for climate-smart agriculture and forestry decision-making. USDA builds on its internal capacity to deliver science-based knowledge to farmers, ranchers, and forest landowners; and recognizes, rewards, and builds upon the private sector's progress with technologies and practices that reduce greenhouse gas emissions, increase carbon storage, and generate clean renewable energy. With the establishment of the regional Climate Hubs, USDA identifies processes for sharing climate change adaptation planning information throughout the Federal, state, and other public and private stakeholders.

Malcom A. Shorter
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Executive Summary

Section 14 of Executive Order (E.O.) 13693, *Planning for Federal Sustainability in the Next Decade*, requires Federal agencies to develop, implement, and annually update an integrated Strategic Sustainability Performance Plan (SSPP), beginning in June 2015 and continuing through fiscal year (FY) 2025.

SECTION 1: VISION

The U.S. Department of Agriculture (USDA) is committed to leading by example in fostering a clean energy economy and to conducting operations in a sustainable and environmentally responsible manner, meeting or exceeding environmental legal and regulatory requirements. USDA's sustainable operations program includes all of the key sustainable practices that E.O. 13693 addresses.

USDA's programs touch almost every American every day. In response to the growing concerns about climate change, greenhouse gases, and depleting natural resources, USDA's mission is designed to create opportunities for farmers, ranchers, forest landowners, public land managers, and families in rural communities. USDA helps these stakeholders generate prosperity while following innovative, sustainable practices to conserve the Nation's natural resources and to prevent pollution.

In order to fulfill its mission of providing leadership on food, agriculture, natural resources, rural development, nutrition, and related issues, USDA focuses on the future. USDA recognizes the significance of global climate change and utilizes this knowledge to create and maintain conditions under which humans and nature can exist in productive harmony.

SECTION 2: LEADERSHIP

The Department formed a Sustainable Operations Council (SOC) to provide executive leadership in implementing the first Sustainability Plan and other E.O. 13514 and E.O. 13423 requirements. SOC objectives include continuing senior management involvement, establishing clear goals and objectives, and developing and implementing policies that result in environmentally-friendly, energy-efficient,   and economically-sound operations at USDA. The SOC reviewed and approved this Plan prior to its submission to the White House Council on Environmental Quality (CEQ) and the Office of Management and Budget (OMB).

The USDA Deputy Assistant Secretary for Departmental Administration serves as Chair of the SOC and as the Department's Chief Sustainability Officer (CSO). The SOC, depicted in Figure 1, is comprised of representatives from the USDA Mission Areas, the Office of Procurement and Property Management, the Office of Operations, the Global Change Program Office in the Office of the Chief Economist, the Office of Budget and Program Analysis (OBPA), the Office of the Chief Information Officer (OCIO), the Office of the Chief Financial Officer (OCFO), and the Office of the General Counsel (OGC)

Five working groups (Electronics Stewardship; Environmental Management; Facilities /Sustainable Buildings/Net Zero Energy, Water, and Waste; Transportation; and Green Purchasing) support the SOC by developing guidance, policies, and tools to assist in implementing sustainability Executive Orders.
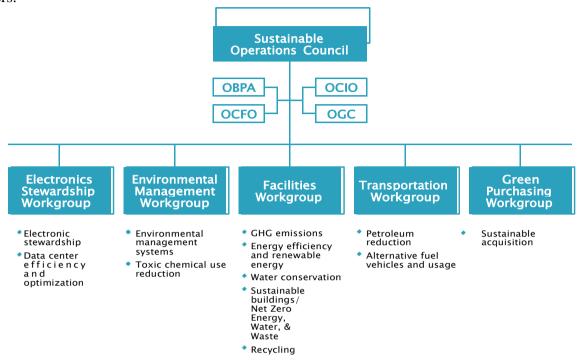
Figure 1: Sustainable Operations Council Organizational Chart

USDA approaches sustainability in a "plan-do-check-act" manner, as illustrated in Figure 2. This system, led by the SOC, provides for leadership involvement while creating opportunities for employee and USDA agency participation, with an overall goal of continual   improvement.

SECTION 3: PERFORMANCE SUMMARY REVIEW

USDA's sustainability goals align with the Department's Strategic Plan. These goals provide annual targets, strategies, and initiatives for achieving E.O. 13693's goals for 2025. Moreover, the goals help to integrate all statutory and Executive Order requirements into a single implementation framework for advancing sustainability practices together with existing mission and management objectives. In targeting and achieving our goals, we have made the best use of existing and available resources and have maintained consistency with available FY 2015 resources. Sustainability goals also include methods for obtaining data needed to measure progress, evaluate results, and improve performance.

Figure 2: Sustainable Implementation

USDA is actively pursuing environmentally sound practices to advance sustainability and reduce greenhouse gas emissions. The Department is committed to leading by example in sustainable operations. Examples of recent accomplishments include:

- Earned "green" scores on six of the seven scoring elements on the OMB Sustainability/Energy Management Scorecard for 2015.
- Purchased 136,572 megawatt-hours of renewable energy (including at least 2.5 percent from new renewable sources), which is equivalent to 29.4 percent of the Department's electricity use.
- Assessed 82 percent of its 2,162 buildings over 5,000 gross square feet (GSF) for sustainability, with 18 percent positive, and required that projects meet Leadership in Energy and Environmental Design (LEED®) Silver criteria in new leasing actions over 10,000 GSF.
- Continued to acquire highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles through the General Services Administration (GSA) Lease Program and GSA AutoChoice.
- Implemented USDA Building Blocks for Climate Smart Agriculture and Forestry to assist farmers, ranchers, forestland owners, and rural communities in responding to climate change.

Existing Department budget line items do not explicitly address sustainability; however, in many cases, sustainability is already an integral part of USDA operations based on Departmental policy, guidance, and direction. Over time, the Department will emphasize sustainability project return on investment to a greater extent than currently occurs when establishing project funding priorities.

The following strategies have been critical to the success of integrating sustainability goals into USDA operations:

- **Attain support of senior leadership and management.** The SOC provides leadership to USDA agencies in conducting their environmental, energy, and transportation-related activities, which has resulted in economically, integrated, continuously improving, and sustainable operations.

- **Include energy efficient/sustainable practices and concepts in the earliest possible phases of construction and renovation projects, activities, or initiatives.** The cost benefits are greatest when these concepts are integral throughout the project and continue through the building's life cycle.

- **Facilitate cross-competency and interagency communication.** Effective communication not only facilitates sound problem solving and decision making—and enhances teamwork— but also helps to secure resources and avoid misunderstandings.

- **Integrate goals into policy, direction, and guidance documents.** Goal integration helps to better document sustainability requirements and ensure alignment and consistency with leadership's priorities.

The performance review and implementation status of USDA's sustainability goals are summarized below.

Goal 1: Greenhouse Gas (GHG) Reduction

In 2010, USDA established a Scope 1 and Scope 2 GHG emissions reduction target of 21 percent by FY 2020, compared to the FY 2008 baseline. In FY 2015, USDA achieved a 30.5 percent reduction in Scope 1 and 2 GHG emissions. In addition to reducing GHG emissions from fleet vehicles (discussed under Goal 5), USDA will continue the following actions to reduce Scope 1 and Scope 2 GHG emissions:

- Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.
- Identify additional sources of data or analysis with the potential to support GHG reduction goals.
- Identify and support management practices or training programs that encourage employee engagement in addressing GHG reduction.
- Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.

In FY 2010, USDA established a Scope 3 GHG emissions reduction target of seven percent in FY 2020, compared to the FY 2008 baseline. In FY 2015, USDA achieved a 22.1 percent reduction in Scope 3 GHG emissions, including big reductions in GHG emissions from business ground and air travel. USDA will continue to focus on reducing emissions from employee commuting, contracted waste disposal (i.e., solid waste disposal and wastewater treatment), and transmission and distribution losses from purchased electricity. In FY 2016 and FY 2017, to pursue further reduction in Scope 3 GHG, USDA will:

- Develop a Multimodal Access Plan (MAP) to address reduction in commuting GHG through increased telework, bicycling, and carpooling.
- Determine which locations already have, and which may be appropriate for, electric vehicle charging stations to increase employee use of electric vehicles.
- Require that new leases over 10,000 GSF include access to public transit as an evaluation factor.

Goal 2: Sustainable Buildings

Building Energy Conservation

In FY 2015, USDA's energy conservation efforts have reduced energy use intensity by 30 percent compared to the FY 2003 baseline. USDA will continue to promote building energy conservation and best management practices by implementing the following strategies:

- Make energy efficiency investments in agency buildings.
- Incorporate Green Button data access system into reporting, data analytics, and automation processes.
- Redesign interior space to reduce energy use through daylighting, space optimization, sensors and control systems, and other life-cycle cost effective energy conservation measures.
- Follow city energy performance benchmarking and reporting requirements.

- Install and monitor energy meters and sub-meters.
- Collect and utilize building and facility energy use data to improve building energy management and performance.
- Ensure that monthly project performance data is entered into the EPA ENERGY STAR Portfolio Manager.

Building Efficiency, Performance, and Management

USDA meets and exceeds key FY 2015 mandates, including the statutory requirement to reduce facility energy intensity by 30 percent, and the executive order goal to have 15 percent of existing building inventory be evaluated as sustainable in the over 24,000 owned and leased departmental facilities nationwide. In FY 2016, USDA continues to make progress in sustainable buildings practices and policies. The Department has assessed 82 percent of its 2,162 buildings larger than 5,000 GSF for sustainability.   The Department reports that 18 percent of its real property portfolio of owned and leased buildings is sustainable.

USDA strives to achieve the Federal government net zero energy, water, and waste goals, and to incorporate the CEQ sustainable site selection and landscaping guidance into practice at agency locations across the nation. The Department is challenged to reach these goals, with its seven diverse mission areas and extensive geographic presence.

USDA engineers and energy managers follow the *Guiding Principles* for Federal Leadership in High Performance and Sustainable Buildings in all life-cycle stages, in siting, designing, constructing, and in operating and maintaining as well as in disposing of and deconstructing buildings. USDA landscapes its sites in keeping with sustainable and Low Impact Development (LID) practices. Real property specialists select sites and submit leasing requests for offers to locate green facilities. USDA, for both owned and leased facilities :

- Utilizes a collaborative department-wide net zero team to set specific net zero energy, water, and waste goals, and to share information.
- Forms work groups and conducts research to implement pilot projects in net zero energy/ sustainable sites/ alternative energy and water conservation technologies.
- Selects sustainable sites and constructs buildings to meet the *Guiding Principles*.
- Utilizes energy conservation strategies to reduce energy use, when upgrading space.
- Includes energy efficiency criteria as a performance specification or a source selection factor in all new agency lease solicitations over 10,000 rentable square feet.
- Incorporates green building specifications into project materials and systems selection, and operations and maintenance practices, to include: Commissioning; indoor environmental quality; reused, recycled, and sustainably sourced materials; and use of wood as the preferred construction material for its energy efficiency and carbon fixing characteristics.
- Recognizes and rewards sustainable building performance, after assessing 82 percent of the 2,162 USDA buildings larger than 5,000 GSF for sustainability, with 18 percent of owned and leased buildings sustainable.
- Collaborates throughout the agency on occupant health and well-being programs and on safety and health and sustainable locations initiatives, primarily through the Facilities and Sustainable Buildings workgroups.

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- Implements optimal space utilization practices, and incorporates public transit access as a selection factor, especially in new lease acquisitions.

USDA, in fulfilling its role in natural resources conservation, works with regional and local communities to protect and conserve the nation's natural resources. FY 2016 and FY 2017 initiatives include:

- Leveraging partnerships to achieve collaborative solutions to environmental problems.
- Providing conservation assistance in regional watershed conservation initiatives.
- Addressing priority natural resources concerns within geographic focus areas.

Goal 3: Clean & Renewable Energy

At the center of USDA's vision is an effort to increase domestic production and use of renewable energy. In 2015, USDA purchased 136,572 megawatt-hours of renewable energy (including at least 2.5 percent from new renewable sources), which is equivalent to 29.4 percent of the Department's electricity use.

This achievement demonstrates a proactive choice to switch away from traditional sources of electricity generation and support cleaner renewable energy alternatives. The increased purchase further demonstrates USDA's commitment to protecting the environment and expands its role in EPA's Green Power Partnership. Purchasing and generating renewable energy helps USDA become more sustainable, while also sending a message to other Federal agencies that supporting new development of clean renewable energy is a sound business decision and a strategic choice in mitigating climate risk.

USDA has learned that when deciding to use renewable energy, agencies can start with a subset of their facilities and then expand once the benefits of renewable energy become more readily apparent.

USDA will continue to promote the use of renewable energy by implementing the following strategies:

- Install USDA-funded on-site renewable energy systems on-site and retain corresponding renewable energy certificates (RECs).
- Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or replacement RECs for the term of the contract.
- Purchase electricity and corresponding RECs or obtain equal value replacement RECs.
- Purchase RECs to supplement on-site renewable energy and green power purchases, when needed.
- Install on-site thermal renewable energy at USDA facilities and retain corresponding renewable attributes or obtain equal value replacement RECs.

Goal 4: Water Use Efficiency and Management

In FY 2015, USDA's conservation efforts have reduced potable water use intensity by 16.9 percent

compared to the FY 2007 baseline; and have reduced industrial, landscaping, and agricultural (ILA) water use by 17.5 percent compared to the FY 2010 baseline. Due to the nature of USDA's mission, however, the agricultural water use goal will be more challenging to achieve than the potable water use goal. Also, USDA lacks a department-wide system for tracking water use, and has to rely on cost-based estimates (from water and other utilities object class accounting codes) for reporting. Nevertheless, improved collection methodologies continue to capture better consumption and costs data each year.

USDA will continue to promote water conservation and best management practices by implementing the following strategies:

- Utilize green infrastructure technologies to restore the water cycle and to manage stormwater.
- Install and monitor water meters and utilize data to advance water conservation and management.
- Install high efficiency technologies, e.g., WaterSense fixtures.
- Minimize outdoor water use and use alternative water sources as much as possible.
- Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.
- Install advanced meters to measure and monitor potable and ILA water use.
- Consistent with State law, maximize use of grey-water and water reuse systems that reduce potable and ILA water consumption.

Goal 5: Fleet Management

USDA owns and operates slightly over 40,000 vehicles, mostly light trucks and sedans, located in cities, rural communities, and National Forests all across the country. These vehicles support the Department's extensive and varied missions, including food safety inspections, agricultural research, fire suppression, and law enforcement. The complexity of USDA mission requirements and the overall size and nationwide dispersion of the fleet make meeting and striving to exceed Federal target goals a challenging effort that requires the commitment of all USDA agency fleet managers.

In FY 2015, USDA realized a 10 percent increase in overall number of alternative fueled vehicles, as well as a 3 percent increase in the number of annual acquisition of new alternative fueled vehicles. The percentage of alternatively-fueled vehicles continued to trend upward as USDA met its goal to have 75 percent of its covered light-duty vehicles acquired be alternatively-fueled vehicles.   To achieve optimal fleet composition, USDA will utilize the vehicle allocation methodology (VAM) to continue to reduce the number of conventional fuel vehicles and increase the percentage of light duty alternative fuel vehicles in its inventory. In addition, agencies will evaluate vehicles that are older, less efficient, high maintenance and/or under- utilized for potential disposition.

Under the previous E.O. 31514, failure to meet USDA targeted goals for reducing its petroleum fuel consumption compared to the FY 2005 baseline were due to an overall increase in miles traveled by USDA vehicles. Under the current E.O. 13693, new targeted goals will require a method of calculating fleet-wide per mile emission reductions that are no longer adversely influenced by the number of miles driven.   In addition, USDA has established better fleet management systems, such as FedFMS and Fleet Dash, to provide better oversight on vehicle utilization. These systems have been integrated with the new USDA Wright Express fleet charge card to capture accurate fuel transactional data.

The following strategies are being implemented to help reduce fleet petroleum consumption and

increase alternative fuel use:

- Perform USDA VAM to optimize/right-size fleet composition.
- Continue to acquire highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles through GSA Lease Program and GSA AutoChoice.
- Increase use of FleetDash and other methods for better utilization of alternative fuel in dual-fuel vehicles.
- Utilize FedFMS dispatch and reservation modules to improve vehicle pooling and sharing across USDA agencies.

Goal 6: Sustainable Acquisition

USDA achieved a 94 percent compliance with sustainable acquisition language in applicable contract actions in FY 2015 and attained 95 percentage in the first two quarters of FY 2016.
For biobased acquisition, USDA achieved 97 percent compliance in FY 2015 and 100 percent for the first two quarters of FY 2016. To help achieve compliance, USDA continued to promote and track acquisition workforce training on both the BioPreferred and AgLearn websites. USDA also conducted two live training sessions in FY 2016 for contracting staff on contractor biobased reporting requirements, and posted self-paced biobased courses to the BioPreferred website in both video and slide formats, covering the topics of contractor reporting, Federal preference program, and the USDA biobased label. In addition, as an outcome of quarterly contract reviews, USDA will continue to alert staff to corrective actions needed to attain compliance within a month of the end of the quarter. To comply with the provisions of E.O. 13693, in FY 2016 and 2017 USDA will:

- Work with USDA agencies to procure products that are both USDA biobased-designated and Safer Choice-labeled whenever possible.
- Revise online Sustainable Acquisition Training module in AgLearn to incorporate E.O. 13693 requirements. Over 6,000 USDA employees have taken this course since 2011.
- Ensure that contractors report their designated biobased purchases through the System for Award Management portal. Conduct biobased reporting webinars and promote reporting module posted to BioPreferred website.

Goal 7: Pollution Prevention & Waste Reduction

USDA commits to continually reduce waste by reducing the use of printed paper, collecting more office recyclables per capita, increasing organics composting, and diverting more construction and demolition waste from landfills by employing best management practices.

In FY 2015, USDA achieved 59 percent waste diversion of non-hazardous solid waste in buildings that have contracted waste removal services. We expect to achieve a 60 percent or better waste diversion rate in FY 2016. In FY 2017, USDA will continue to update Chemicals Inventory Plans for individual facilities, especially laboratories, in order to further reduce toxic and hazardous chemicals and materials. The focus of these updates will be to acquire non-toxic alternatives as toxic or hazardous materials are phased out.

Goal 8: Energy Performance Contracts

In FY 2015, USDA agencies continued to realize energy and cost savings from Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs) awarded in previous fiscal years. For FY 2016 and beyond, USDA will continue to implement the strategies listed below to increase the use and effectiveness of Energy Performance Contracts within the Department:

- Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures.
- Fulfill existing USDA performance contracting commitments towards the Federal Government's performance contracting goal by the end of calendar year 2016.
- Evaluate 25 percent of USDA's most energy intensive facilities for use with energy performance contracts.
- Identify and commit to include onsite renewable energy projects in a percentage of energy performance contracts.
- Submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.
- Ensure relevant legal and procurement staff participate in the Federal Energy Management Program's ESPC/ UESC training.

Goal 9: Electronic Stewardship

USDA has accomplished all three electronic stewardship goals: the acquisition of Electronic Product Environmental Assessment Tool (EPEAT)-registered products for 95 percent of eligible electronics; implementation of power management for 100 percent of eligible computers and monitors; and handling 100 percent of excess and surplus electronics equipment in an environmentally sound manner. USDA has monitoring and reporting systems for electronics' acquisition, usage, and disposition phases. All new printers and multifunction devices installed since 2014 default to duplex and monochrome printing. In fulfillment of E.O. 13693 goals, USDA will:
- Procure only EPEAT-registered computers, notebooks, displays, and tablets.
- Ensure that all printers and multifunction devices installed in FY 2015 and 2016 default to duplex and monochrome (black & white) printing.
- Continue to partner with UNICOR and U.S. Postal Service Blue Earth for electronics recycling services.

For data centers, USDA has issued and implemented policy for data center energy optimization, efficiency, and performance.   All tiered data centers have advanced metering installed. USDA offers flexible and cost effective cloud services as an alternative to "server rooms" and underutilized or obsolete data centers. In order to fully comply with EO 13693, USDA will, by the end of 2017:

- Install advance metering in all non-tiered data centers not planned for closing.
- Close 80 percent of underutilized and obsolete data centers.

Goal 10: Climate Change Resilience

USDA agencies are positioning to adapt to the vulnerabilities and risks inherent with climate change, and to meet challenges and opportunities that it presents. These activities align with the overarching USDA strategic planning goals and the objectives of climate change outlined below.

In 2015, USDA issued a policy statement on Climate Change Adaptation that provides guidance on establishing and periodically revising the USDA adaptation plans (DR 1070-001). The policy statement and USDA's Climate Change Adaptation Plan (CCAP) assists USDA in identifying how climate change is likely to affect its ability to achieve mission, operations, policy, and program objectives. These documents are part of USDA's effort to implement sections of E.O. 13514, E.O. 13653, E.O. 13677, and E.O. 13693. The documents are consistent with the 2014-2018 USDA Strategic Plan and guidance from the Council on Environmental Quality, President's Climate Action Plan (PCAP), Council on Climate Change Preparedness and Resilience, Federal Interagency Climate Change Adaptation Task Force, and the recommendations of the State, Local, and Tribal Leaders Task Force on Climate Preparedness and Resilience. Through the adaptation and planning measures described in these documents, USDA:

- Identifies how impacts of climate change are likely to affect its ability to achieve USDA mission, operations, and policy and program objectives.
- Analyzes Departmental vulnerabilities to climate change.
- Implemented USDA Regional Climate Hubs for Risk Adaptation and Mitigation to Climate Change and foster cross-jurisdictional cooperation and partnerships.
- Implemented USDA Building Blocks for Climate Smart Agriculture and Forestry to assist farmers, ranchers, forestland owners, and rural communities in responding to climate change.
- Considers potential climate change impacts when undertaking long-term planning, setting priorities for scientific research and investigations, and making decisions affecting agency resources, programs, and operations.
- Prioritizes actions related to climate change adaptation.
- Develops and maintains an adaptation plan for managing the challenges and taking advantage of any opportunities afforded by climate change.
- Helps state and local governments, tribes, and territories manage disaster risks and preparedness by building their capacity to monitor and assess hazards.
- Supports international partnerships such as Global Research Alliance (GRA) and Global Alliance for Climate Smart Agriculture (GACSA) to improve climate resiliency in the developing world.

SECTION 4: PROGRESS ON ADMINISTRATION PRIORITIES

This section provides an overview of USDA's vision for FY 2016 and beyond regarding Administration priorities and initiatives regarding sustainable locations, sustainable landscaping, water efficiency, performance contracting, and climate change resilience.

President's Performance Contracting Challenge

USDA's commitment under the President's Performance Contracting Challenge is $38 million in contracts awarded by the end of calendar year 2016. USDA's performance contract award targets for FY 2017 and FY 2018 are $10 million and $25 million, respectively.

To achieve its performance contracting targets in FY 2016 to FY 2018, USDA agencies will continue to review data from the Energy Independence and Security Act of 2007 (EISA) Section 432 site energy and water evaluations to determine the feasibility of employing the use of Energy Performance Contracts (EPCs) as a follow-up to the site evaluations. USDA will also continue to employ the use of ENABLE contracts for its smaller facilities.

Electric and Zero Emission Vehicles (EVs and ZEVs)

USDA currently has minimal Electric Vehicle (EV) charging infrastructure to support acquisition of many Zero Emission Vehicles (ZEVs) or Plug-in Hybrid Electric Vehicles (PHEVs). USDA's geographically dispersed and often remote locations for program delivery would require establishing a robust infrastructure prior to procuring electric only vehicles. For instance, USDA has employees in nearly every county in the country, and food inspectors that sometimes cover large geographic territories. One national forest, the Tongass in Alaska, is larger in area than several states! In the interim, USDA has significantly increased its number of hybrid electric and low GHG vehicles acquired from FY 2013 to FY 2015, and continues to make their acquisition a priority.

Climate Preparedness and Resilience

Actions and Updates:

Historically, U. S. farmers, ranchers, and forest landowners have become adept at adapting to weather challenges. Climate change poses new threats: longer and more intense droughts, stronger and more frequent storms, invasive species and pests attacking large tracts of forest, increasing and more intense wildfires and large-scale flooding. Nearly one-third of the President's Climate Action Plan addresses agriculture, forestry and land stewardship. Farmers, ranchers and forest landowners are looking for tools, technologies and new partnerships to manage investments against risk. Central to this stakeholder recognition, USDA has moved aggressively to embrace innovations and taken a conservation focus, taking action to make Agency programs and policies more climate resilient. By 2025, USDA expects to play a significant role in assisting the U.S. in meeting its commitment to the Paris Agreement. Efforts in FY 2016 included:

- Enrolled record numbers of acres in conservation programs using new models of stewardship that integrate local, national, public and private partners and meet the needs of producers to enhance productivity, increase efficiency and improve yields as they adapt.
- Implemented the nation's first comprehensive planning rule in decades to ensure the health and sustainability of 193 million acres of national forests. Each plan requires identification and evaluation of climate stressors and monitoring of impacts and a scorecard.
- With the establishment of seven USDA Regional Climate Hubs and three Sub-hubs to provide producers and landowners with useful data and guidance for decision-making at region-specific levels, USDA completed vulnerability and risk assessment plans for each Hub, build decision support tools and prepared outreach materials for climate-informed decisions.
- Implemented 10 Building Blocks for Climate Smart Agriculture and Forestry which span

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technologies and practices to reduce greenhouse gas emissions, increase carbon storage and generate renewable energy. Encouraging partnerships with wide-ranging and diverse groups of entities including Walmart, Nature Conservancy, Fertilizer Institute, Forest Climate Working Group and many others allowed announcements of early actions and commitments to more sustainable practices that will produce meaningful results. A progress report and update was released in May 2016 detailing accomplishments and future plans.

- Invested unprecedented resources in climate research and developed applications for science-based tools that landowners can use to evaluate their management options.
- Made commitments to energy efficiency that resulted in programs to assist rural businesses in annual energy savings to power more than 950,000 homes (104 billion kilowatt-hour equivalents);
- Invested over $38 billion in utility loans and grants and more than $1 billion in smart grid technologies, and built more than 185,000 transmission miles to serve five million rural or disadvantaged customers since 2009.
- Co-founded a Global Alliance for Climate Smart Agriculture (GACSA) that included more than 120 nations and partners to enhance agricultural productivity, build greater resilience of food systems and incomes, and work to reduce greenhouse gas emissions and increase CO_2 sequestration.
- Directed Forest Service staff to ensure resources are spent as intended and not exhaust significant portions of the budget for fire suppression that forces this sub-agency to begin transferring critical resources away from their operating budget to restore forests and fuels management, practices that increase resiliency of lands to recover from fire and protect communities and infrastructure. The additional resources will increase forest and rangeland management in over one million acres annually to maintain and protect ecosystems. Proposed legislation to permanently restructure financing of fire suppression—the Wildfire Disaster Funding Act (WDFA), which is awaiting Congressional action.

Future Targets:

- In partnership with EPA, USDA is committing to initiate the U.S. Food Waste Challenge with a goal to reduce national food waste 50% by 2030.
- The Regional Climate Hubs continue to foster cross-jurisdictional cooperation and partnerships as new tools and management strategies are customized to meet stakeholder needs at regional and local levels. One example milestone for FY 2017 and 2018 is planned to interpret and tailor downscaled predictions and data delivered from National Oceanic and Atmospheric Administration (NOAA) to meet stakeholder needs at targeted Hubs.
- A biennial Conservation Indicators project is planned for 2017 and 2018 to begin data integration on conservation trends survey data and report these data by year and at regional scales. The first reporting is also expected to contribute to the next cycle of the U.S. Greenhouse Gas Inventory Report, identify data gaps, and made available to UN review teams assigned to assess U. S. progress in meeting commitments under the 2015 Paris Agreement.
- The Building Blocks for Climate Smart Agriculture and Forestry will release a progress report each year. This voluntary package is expected to reduce emissions by more than120 million metric tons of CO_2 equivalents per year by 2025.

Size & Scope of Agency Operations

Agency Size and Scope	FY 2014	FY 2015
Total Number of Employees as Reported in the President's Budget	99,500	94,300
Total Acres of Land Managed	193,139,814	193,140,739
Total Number of Buildings Owned	20,907	20,731
Total Number of Buildings Leased (GSA and Non-GSA Lease)	4,294	3,273
Total Building Gross Square Feet (GSF)	69,100,715	56,473,892
Operates in Number of Locations Throughout U.S.	22,984	22,984
Operates in Number of Locations Outside of U.S.	100	100
Total Number of Fleet Vehicles Owned	33,695	33,833
Total Number of Fleet Vehicles Leased	6,456	6,514
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	4,517	5,301
Total Amount Contracts Awarded as Reported in the Federal Procurement Data System (FPDS) ($Millions)	5,343	6,071

Agency Progress and Strategies to Meet Federal Sustainability Goals

This section provides an overview of progress through FY 2015 on sustainability goals contained in Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*, and agency strategies to meet the new and updated goals established by Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*.

Goal 1: Greenhouse Gas (GHG) Reduction

Scope 1 & 2 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 1 & 2 GHG emissions reduction target to be achieved by FY 2025 compared to a 2008 baseline. USDA's 2025 Scope 1 & 2 GHG reduction target is 43 percent.

Figure 3: USDA Progress Toward Scope 1 and 2 Greenhouse Gas Reduction Goal

Scope 1 & 2 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.	Yes	Analyze USDA's 2014 GHG Emissions report to identify high emission sources and implement Green Team-recommended actions to mitigate emissions from those sources.	(1) Identify and delineate high emissions categories by the end of FY 2016; (2) Implement at least three specific actions to address high emissions areas by the end of FY 2017.
Identify and support management practices or training programs that encourage employee engagement in addressing GHG reduction.	Yes	Continue development of GHG and sustainability training and awareness for all facility/energy managers and other employees. Establish a method to facilitate tracking training completion.	(1) Develop GHG and sustainability training content and a departmental tracking system by the end of 2016; (2) Coordinate and track training for 10 percent of USDA facilities/energy managers by the end of 2017.
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources.	No	No unsuccessful programs or measures were identified.	
Given agency performance to date, determine whether current agency GHG target should be revised to a more aggressive/ambitious target.	No	No goals in EO 13693 were identified as unambitious targets as compared to USDA's past performance.	
Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.	Yes	Employ O&M Best Practices that include parameters for operational efficiency and control of equipment at USDA facilities.	(1) Identify and/or develop O&M Best Practices by the end of 2016; (2) Employ at least five Best Practices by the end of FY 2017.
Identify additional sources of data or analysis with the potential to support GHG reduction goals.	Yes	USDA will promote the procurement of agricultural carbon offsets.	**PENDING APROVAL FROM CEQ:** (1) Develop specifications for procuring agricultural carbon-offsets (Ag-Offsets) by the end of FY 2016; (2) Purchase Ag-Offsets equivalent to two percent of USDA's total FY 2016 Scope 1 & 2 greenhouse gas emissions by the end of FY 2017.

Scope 3 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 3 GHG emission reduction target to be achieved by FY 2025 compared to a 2008 baseline. USDA's 2025 Scope 3 GHG reduction target is 40 percent.

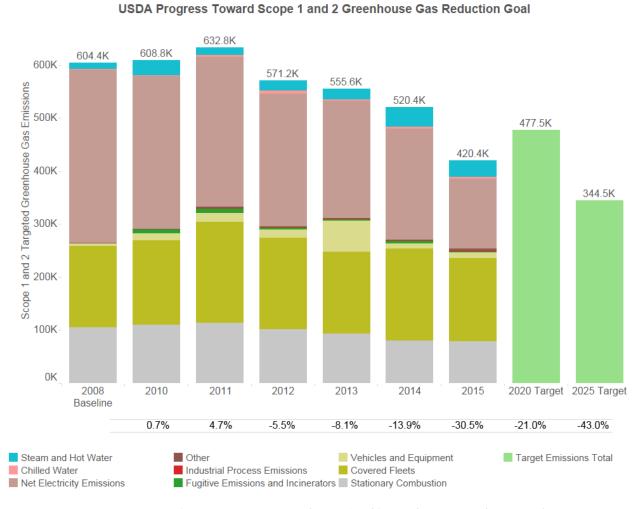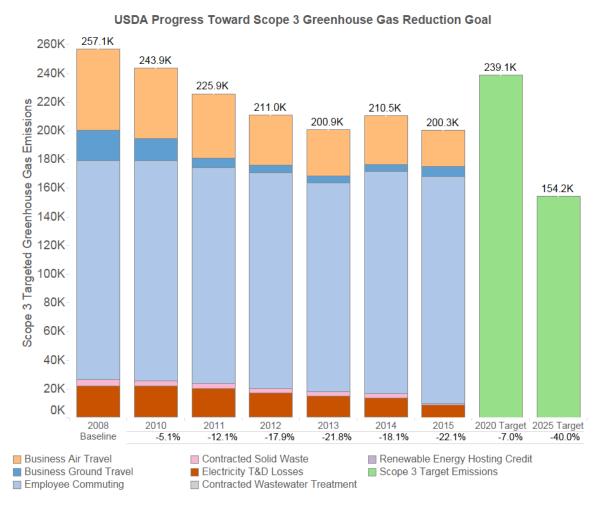*Figure 4: USDA Progress Toward Scope 3 Greenhouse Gas Reduction Goal*

Scope 3 GHG Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	No	USDA has a low GHG emissions rate with regard to business ground travel, which USDA has reduced by more than 50% since the baseline year.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Reduce employee business air travel.	No	USDA has decreased by more than 50% its business air travel GHG emissions since the baseline year.	
Develop and deploy an employee commuter emissions reduction plan.	Yes	USDA developed, and will publish, a Multimodal Access Plan (MAP) in FY 2016 that addresses employee commuter GHG emissions reduction.	Will continue to revise the MAP in FY 2017 as we obtain additional information on opportunities for further emissions reductions.
Use an employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	USDA will continue to look for opportunities to increase use of carpooling and public transit as a means of reducing Scope 3 GHG emissions.	In FY 2017 USDA will research various tools for surveying employees about commuting.
Increase & track number of employees eligible for telework and/or the total number of days teleworked.	Yes	USDA is committed to increased telework for employees whose job series and locations lend themselves to telework. The USDA will continue to track the number of employees eligible for telework as well as the number of days actually teleworked. USDA has a National Telework Coordinator as well as a network of Agency and State Telework Coordinators.	(1) Continue to host Telework Pledge Week, whose survey provides valuable information about telework interest and trends. (2) Conduct quarterly training for Agency Telework Coordinators in FY 2017. (3) Install additional teleconferencing tools for locations that lack them in FY 2017.
Develop and implement a program to support alternative/zero emissions commuting methods and provide necessary infrastructure.	Yes	USDA is committed to alternative/zero emissions commuting methods. USDA presently provides some of the necessary infrastructure, and will provide additional infrastructure as CEQ guidance clarifies related statutory language.	USDA is issuing a MAP in FY 2016 to implement a program to support alternative/zero emissions commuting methods. The MAP also addresses the various infrastructure scenarios, some of which will depend on further guidance from CEQ on the Fixing America's Surface Transportation (FAST) law.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish policies and programs to facilitate workplace charging for employee electric vehicles.	Yes	USDA is committed to providing opportunities for employees to use Federal charging stations for employee electric vehicles.	In FY 2017 USDA will determine which locations already have, and which may be appropriate for, electric vehicle charging stations. Based on CEQ guidance, USDA will issue guidance about use of Federal charging stations for personal vehicles by the end of FY 2018.
Include requirements for building lessor disclosure of carbon emission or energy consumption data and report Scope 3 GHG emissions for leases over 10,000 rentable square feet.	Yes	Disclosing carbon emissions and energy consumption will be part of new leases of over 10,000 square feet.	In new leasing actions of over 10,000 square feet, USDA will require disclosure of carbon footprint and energy data in FY 2016 and FY 2017.

Goal 2: Sustainable Buildings

Building Energy Conservation Goal

The Energy Independence and Security Act of 2007 (EISA) requires each agency to reduce energy intensity 30% by FY 2015 as compared to FY 2003 baseline. Section 3(a) of E.O. 13693 requires agencies to promote building energy conservation, efficiency, and management and reduce building energy intensity by 2.5% annually through the end of FY 2025, relative to a FY 2015 baseline and taking into account agency progress to date, except where revised pursuant to Section 9(f) of E.O. 13693.
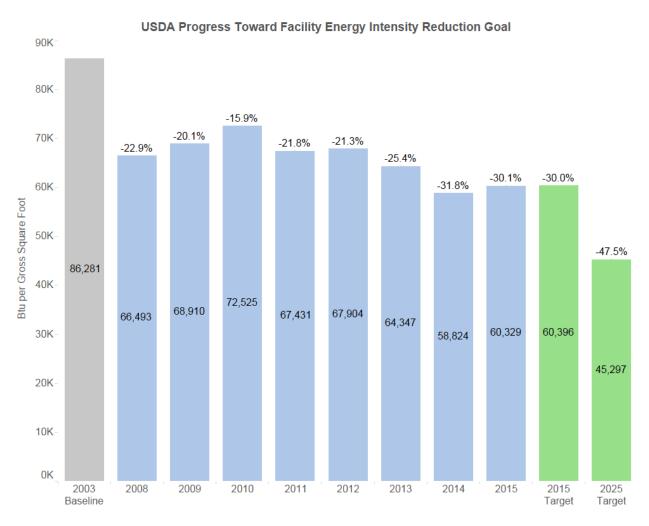
Figure 5: USDA Progress Toward Facility Energy Intensity Reduction Goal

Building Energy Conservation Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics

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Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Make energy efficiency investments in agency buildings.	Yes	USDA will continue to make energy efficiency investments in its facilities and buildings.	Annually invest in energy efficiency upgrades and retrofits equivalent to at least 10 percent of USDA energy expenditures.
Use remote building energy performance assessment auditing technology	No	Research and analysis will be conducted on remote auditing technology; however, such technology and related training is not anticipated to be employed at USDA within the next 12 to 18 months.	
Participate in demand management programs.	No	Research and analysis will be conducted on demand management programs available to USDA facilities - with high potential for program participation in FY 2018 and beyond.	
Incorporate Green Button data access system into reporting, data analytics, and automation processes.	Yes	Where available, USDA agencies will incorporate Green Button data access system into reporting, data analytics, and automation processes.	Incorporate Green Button data into reporting, data analytics, and automation processes for 20 percent of facilities (*where Green Button data is available*) by the end of FY 2017
Redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems.	Yes	USDA will redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems (when life-cycle cost effective).	By FY 2018, review all redesigns of interior space for consideration and integration of daylighting, space optimization, and sensors and control systems to reduce energy.
Identify opportunities to transition test-bed technologies to achieve energy reduction goals.	No	Research and analysis will be conducted on various test-bed technologies; however, it is not anticipated that such technologies will be implemented at USDA within the next 12 to 18 months.	
Follow city energy performance benchmarking and reporting requirements.	Yes	USDA agencies will adhere to local and city energy performance benchmarking and reporting requirements.	Ensure 100 percent compliance with benchmarking and reporting requirements by the end of FY 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install and monitor energy meters and sub-meters.	Yes	USDA will continue to install and monitor energy meters and sub-meters.	Install and monitor energy meters for 100 percent of applicable USDA buildings by the end of FY 2016, and thereafter.
Collect and utilize building and facility energy use data to improve building energy management and performance.	Yes	USDA will continue to collect and utilize building and facility energy use data to improve building energy management and performance.	Develop and implement guidelines for utilizing energy data to improve energy management/performance by the end of March 2017.
Ensure that monthly performance data is entered into the EPA ENERGY STAR Portfolio Manager.	Yes	USDA will enter monthly project performance data into Energy Star Portfolio Manager.	By the end of FY 2016 and every month thereafter, enter project performance data into EPA Portfolio Manager.

Building Efficiency, Performance, and Management Goal

Section 3(h) of E.O. 13693 states that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target. USDA's 2025 net-zero buildings target is 2.1 percent.

Guiding Principles for Sustainable Federal Buildings

Section 3(h) of E.O. 13693 also states that agencies will identify a percentage, by number or total GSF, of existing buildings above 5,000 GSF that will comply with the *Guiding Principles for Sustainable Federal Buildings (Guiding Principles)* by FY 2025.

USDA's FY 2025 sustainable buildings target is 19.6 percent, by the number of buildings.

USDA Percent of Buildings Meeting the Guiding Principles
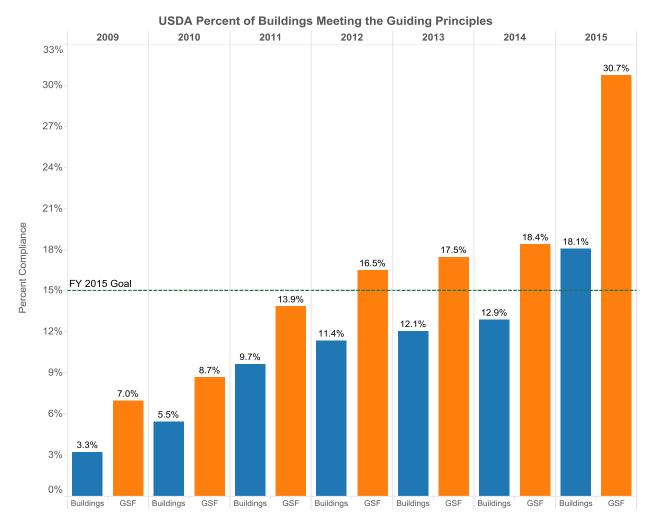
Figure 6: USDA Percent of Buildings Meeting the Guiding Principles

USDA has increased the number and variety of sustainable buildings projects and practices over the past two decades. USDA's agency presence is far-reaching across the nation, with almost 24,000 geographically decentralized and often remote locations for program delivery.

USDA has opportunities to share information with Federal agencies, members of educational institutions, state and local governments, and the public, who collaborate and depend upon the department's sites, structures, and land. There are many opportunities to educate and inform others about sustainable buildings at departmental facilities nationwide. USDA leadership and agency sustainable buildings subject matter experts, including the engineers, energy management and real property staff who build, operate and maintain, and lease facilities are the primary sources of education and information sharing.

Sustainable Buildings Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings.	No	While USDA works on climate change mitigation strategies within its net zero initiative, the department has yet to include climate resilience into renovations and new building designs throughout the real property portfolio. USDA commits considerable resources to helping farmers, ranchers, and foresters mitigate and become resilient to the effects of climate change (see Goal 10, below).	
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit.	Yes	USDA is implementing optimal space utilization, and will incorporate access to public transit as a factor, especially in new lease acquisitions.	USDA continues to optimize space utilization in newly renovated owned buildings and in new leased space. In FY 2017, all new leasing actions over 10,000 GSF will require LEED silver certification, a component of which is access to public transit.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure all new construction of Federal buildings greater than 5,000 GSF that enters the planning process be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030.	Yes	USDA utilizes a collaborative department-wide net zero team to plan for net zero construction and operations, holding quarterly collaborative net zero team meetings to continue through FY 2016 and FY 2017. The agenda is to set net zero goals to share successes and challenges within USDA agencies, and to research and implement projects in net zero energy, water, and waste technologies. The team builds on the current success of the Forest Service net zero team. USDA environmental managers, engineers, energy managers, and real property officers collaborate on this initiative.	USDA recommends that all agency new designs include analyses for, and use scope of work language for Net Zero Energy and, where possible, Net Zero Water, and/ or Waste. The USDA aspires to reach a level of 5% of new construction projects net zero by FY 2020. Currently, the Forest Service is pursuing multiple Net Zero Energy initiatives at its installations including the San Dimas California Development Center and a Net Zero Energy study at the Shoshone National Forest, including detailed facility energy consumption audits.
Include criteria for energy efficiency as a performance specification or source selection evaluation factor in all new agency lease solicitations over 10,000 rentable square feet.	Yes	USDA is committed to optimum energy efficiency in leased space.	In FY 2017 new USDA lease solicitations will require LEED silver certification, an important component of which is energy efficiency.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Incorporate green building specifications into all new construction, modernization, and major renovation projects.	Yes	All new building construction and major renovation projects are managed by integrated design teams. The USDA agency teams include green building specifications on: 1. Utilizing commissioning throughout the design, construction, and operations phases; 2. Beneficial indoor environmental quality for all new buildings; 3. Giving preference to reused, recycled, and sustainably sourced materials, and 4. Using domestically harvested wood products as the preferred construction material for its environmental benefits, and sharing information on this sustainable practice and on wood's environmental life cycle benefits such as reduced energy consumption and greenhouse gas (GHG) emissions.	USDA agencies, through the Sustainable Buildings Work Group, plan by the end of FY 2017 to share successes in using green building specifications, incorporating these specifications into all new construction, modernization, and major renovation projects. The goal is to ensure that these practices are in USDA agency policy.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Implement space utilization and optimization practices and policies.	Yes	USDA's Property Management team will continue to lead the work of this strategy, with the departmental Lease Accountability and Strategy Division. USDA will continue through FY 2017 and FY 2018 to implement space utilization and optimization policies and practices throughout its real property profile.	Continue to work with USDA agencies in FY 2016, especially through the Lease Accountability and Strategy Division, to reduce the footprint and optimizing the real property profile. By the end of FY 2016, USDA will measure progress against its 2015 space utilization and optimization policy milestone.
Implement programs on occupant health and well-being in accordance with the *Guiding Principles.*	Yes	USDA Environmental and Property Management teams will continue to collaborate with USDA agencies in FY 2016, especially through its Facilities/ Sustainable Buildings Work Groups, to implement programs on occupant health and well-being along with safety and health and sustainable locations initiatives.	The USDA agencies, through the Sustainable Buildings Work Group, plan by the end of FY 2017 to share information specifically focusing on occupant health and well-being in accordance with the *Guiding Principles.*

Goal 3: Clean & Renewable Energy

Clean Energy Goal

E.O. 13693 Section 3(b) requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10% in FY 2016-17; 13% in FY 2018-19; 16% in FY 2020-21; 20% in FY 2022-23; and 25% by FY 2025.

Renewable Electric Energy Goal

E.O. 13693 Section 3(c) requires that renewable energy account for not less than 10% of total electric energy consumed by an agency in FY 2016-17; 15% in FY 2018-19; 20% in FY 2020-21; 25% in FY 2022-23; and 30% by 2025.

Figure 7: Use of Renewable Energy as Percentage of Total Electric Energy

Clean and Renewable Energy Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics

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Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install agency-funded renewable on-site and retain corresponding renewable energy certificates (RECs).	Yes	USDA will continue to transition from traditional sources of electricity generation by increasing the number of onsite renewable energy systems at USDA facilities.	Install at least 2 new renewable energy systems at USDA facilities and retain corresponding RECs by the end of June 2017.
Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or obtain replacement RECs.	Yes	USDA will continue to transition from traditional sources of electricity generation by increasing the use of Power Purchase Agreements (PPAs).	Enter into at least 3 new PPAs which allow for USDA to retain RECs or replacement RECs for term of PPAs by the end of FY 2017.
Purchase electricity and corresponding RECs or obtain equal value replacement RECs.	Yes	USDA will continue to transition from traditional sources of electricity generation by increasing purchases of green power.	(1) Purchase green power and corresponding RECs equivalent to 5 percent of USDA's total FY 2015 electricity use by the end of FY 2016; (2) Purchase green power and corresponding RECs equivalent to 7.5 percent of USDA's total FY 2016 electricity use by the end of FY 2017.
Purchase RECs to supplement installations and purchases of renewable energy, when needed to achieve renewable goals.	Yes	USDA will continue to transition from traditional sources of electricity generation by increasing purchases of RECs.	(1) Purchase RECs equivalent to 5 percent of USDA's total FY 2015 electricity use by the end of FY 2016; (2) Purchase RECs equivalent to 7.5 percent of USDA's total FY 2016 electricity use by the end of FY 2017.
Install on-site thermal renewable energy and retain corresponding renewable attributes or obtain equal value replacement RECs.	Yes	USDA will continue to transition from traditional sources of energy generation by increasing the number of onsite thermal renewable energy systems at USDA facilities.	Install at least 2 new thermal renewable energy systems at USDA facilities and retain corresponding renewable attributes or obtain equal value replacement RECs by the end of 2017.
Install on-site combined heat and power processes.	No	Research and analysis will be conducted on combined heat and power processes; however, it is not anticipated that such systems will be implemented at USDA within the next 12 to 18 months.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify opportunities to install on-site fuel cell energy systems.	No	Research and analysis will be conducted on fuel cell energy systems; however, it is not anticipated that such systems will be implemented at USDA within the next 12 to 18 months.	
Identify opportunities to utilize energy that includes the active capture and storage of carbon dioxide emissions associated with energy generation.	No	Research and analysis will be conducted on the capture and storage of CO_2 emissions associated with energy generation; however, it is not anticipated that such systems will be implemented at USDA within the next 12 to 18 months.	
Identify and analyze opportunities to install or contract for energy installed on current or formerly contaminated lands, landfills, and mine sites.	No	Research and analysis will be conducted into installing or contracting for energy-generating systems installed on contaminated lands, landfills, and mine sites; however, it is not anticipated that such systems will be installed at USDA within the next 12 to 18 months.	
Identify opportunities to utilize energy from small modular nuclear reactor technologies.	No	Research and analysis will be conducted into utilizing energy from small modular nuclear reactor technologies; however, it is not anticipated that such systems will be implemented at USDA within the next 12 to 18 months.	

Goal 4: Water Use Efficiency & Management

Potable Water Consumption Intensity Goal

E.O. 13693 Section 3(f) states that agencies must improve water use efficiency and management, including stormwater management, and requires agencies to reduce potable water consumption intensity, measured in gallons per square foot, by 2% annually through FY 2025 relative to an FY 2007 baseline. A 36% reduction is required by FY 2025.

Industrial, Landscaping and Agricultural (ILA) Water Goal

E.O. 13693 section 3(f) also requires that agencies reduce ILA water consumption, measured in gallons, by 2% annually through FY 2025 relative to a FY 2010 baseline.
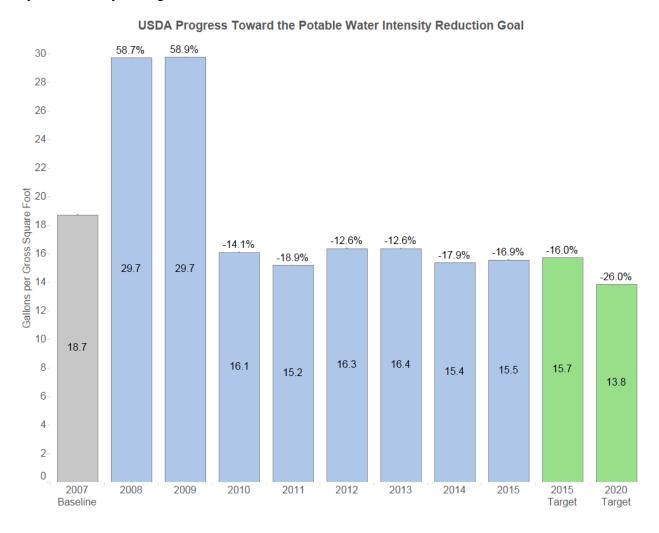

Figure 8: USDA Progress Toward the Potable Water Intensity Reduction Goal

Water Use Efficiency & Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics

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Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Install green infrastructure features to assist with storm and wastewater management.	Yes	USDA continues to implement a variety of green infrastructure and watershed protection projects, for example at Headquarters, APHIS, and Forest Service facilities. NRCS continues a pair of Regional Conservation Partnership Programs in the Mississippi and Chesapeake Bay watersheds.	Plan multiple sustainable landscaping and green infrastructure projects at USDA facilities by the end of FY 2017. Construct these sustainable landscaping projects by the end of FY 2020.
Install and monitor water meters and utilize data to advance water conservation and management.	Yes	USDA will continue to install and monitor water meters and sub-meters.	Install and monitor water meters and utilize data for 25 percent of applicable USDA buildings by the end of June 2017.
Install high efficiency technologies, e.g. WaterSense fixtures.	Yes	USDA will continue to implement lifecycle cost effective water conservation measures (WCMs) from EISA 432 covered facilities evaluations, including purchasing and installing water efficient technologies (e.g., WaterSense low-flow water fixtures and aeration devices).	(1) By the end of June 2016 - Conduct water evaluations on 25 percent of covered facilities and upload data into EISA 432 Compliance Tracking System; (2) By the end of FY 2016 - Identify all lifecycle cost effective WCMs; (3) By the end of June 2017 - Implement priority lifecycle cost effective WCMs.
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost.	No	Research and analysis will be conducted into the development of a water asset management plan; however, it is not anticipated that such a plan will be implemented at USDA within the next 12 to 18 months.	
Minimize outdoor water use and use alternative water sources as much as possible.	Yes	Continue to operate USDA's Sustainable Landscape Partnership (SLP) within the National Capital Region (NCR), as well as, expand to regions outside NCR.	Implement SLP at four regions outside NCR by the end of June 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Yes	USDA will continue to design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	Design and deploy at least three water closed-loop, capture, recharge, and/or reclamation systems by end of FY 2017.
Install advanced meters to measure and monitor potable and ILA water use.	Yes	USDA will continue to install advanced meters to measure and monitor potable and ILA water use.	Install and monitor advanced water meters for 10 percent of applicable USDA buildings by the end of June 2017.
Develop and implement programs to educate employees about methods to minimize water use.	No	Research and analysis will be conducted into the development of a water conservation awareness and education program at USDA; however, it is not anticipated that such a program will be implemented at USDA within the next 12 to 18 months.	
Assess the interconnections and dependencies of energy and water on agency operations, particularly climate change's effects on water which may impact energy use.	No	An assessment of the interconnections and dependencies of energy and water on USDA operations (particularly climate change's effects on water which may impact energy use); however, it is not anticipated that such an assessment will be completed within the next 12 to 18 months.	
Consistent with State law, maximize use of grey-water and water reuse systems that reduce potable and ILA water consumption.	Yes	USDA will continue to install grey-water and water reuse systems that reduce potable and ILA water use.	Design and deploy at least three grey-water and water reuse systems by the end of FY 2017.
Consistent with State law, identify opportunities for aquifer storage and recovery to ensure consistent water supply availability.	No	Research and analysis will be conducted into aquifer storage and recovery; however, it is not anticipated that such a systems will be implemented at USDA within the next 12 to 18 months.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	No	Research and analysis will be conducted into associated savings between energy efficiency and water conservation; however, it is not anticipated that many such opportunities will be considered at USDA within the next 12 to 18 months.	
Where appropriate, identify and implement regional and local drought management and preparedness strategies that reduce agency water consumption	No	Research and analysis will be conducted into regional and local drought management and preparedness strategies; however, it is not anticipated that resulting strategies will be implemented as part of USDA operations within the next 12 to 18 months.	

Goal 5: Fleet Management

Fleet Petroleum Use Reduction Goal

E.O. 13514 and the Energy Independence and Security Act of 2007 (EISA) required that by FY 2015 agencies reduce fleet petroleum use by 20% compared to a FY 2005 baseline.

USDA Progress Toward the Petroleum Reduction Goal
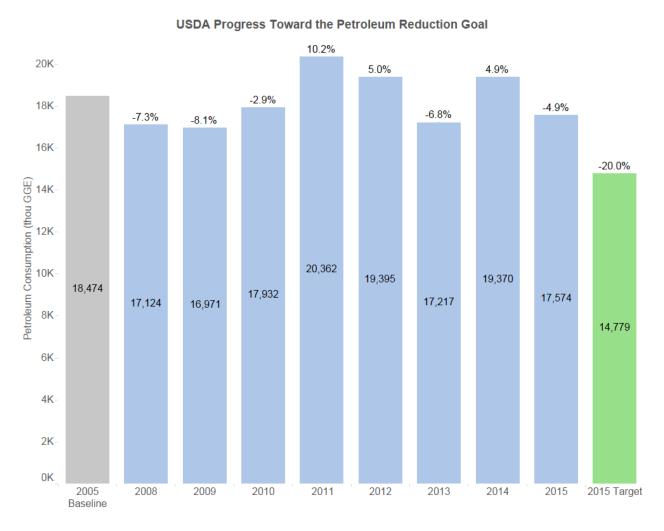
Figure 9: USDA Progress Toward the Petroleum Reduction Goal

Fleet Alternative Fuel Consumption Goal

Agencies should have exceeded an alternative fuel use that is at least 5% of total fuel use. In addition, E.O. 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*, required that agencies increase total alternative fuel consumption by 10% annually from the prior year starting in FY 2005. By FY 2015, agencies must have increased alternative fuel use by 159.4%, relative to FY 2005.

In FY 2015, USDA's use of alternative fuel equaled 2 percent of total fuel use. USDA has increased its alternative fuel use by 38.7 percent since FY 2005.

Fleet Per-Mile Greenhouse Gas (GHG) Emissions Goal

E.O. 13693 Section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. E.O. 13693 section 3(g)(ii) requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to a FY 2014 baseline and sets new goals for percentage reductions: not less than 4% by FY 2017; not less than 15 % by FY 2020; and not less than 30% by FY 2025.

E.O. 13693 Section 3(g)(i) requires that agencies determine the optimum fleet inventory, emphasizing eliminating unnecessary or non-essential vehicles. The Fleet Management Plan and Vehicle Allocation Methodology (VAM) Report are included as appendices to this plan.

Figure 10: USDA Fleet-wide Per-mile Greenhouse Gas Emissions

Fleet Management Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics

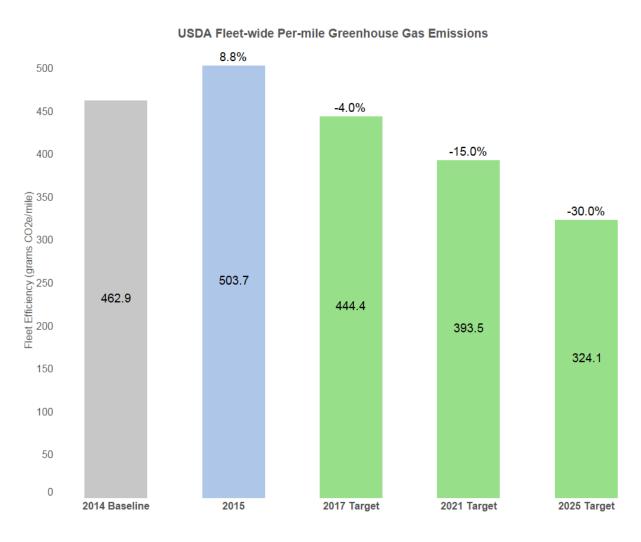| Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Collect and utilize agency fleet operational data through deployment of vehicle telematics.	Yes	Assess each light duty and mid-size vehicle for telematics. Vehicles that can provide electronic VLD to the FMIS without telematics may request an exemption.	Work with GSA to establish most cost efficient telematics to collect data and monitor vehicle use for both owned and leased vehicle assets by the end of FY 2017.
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system.	Yes	Fully implement new Wright Express (WEX) fleet card solutions for USDA owned fleet assets, i.e., VIN decoder and Clearview solutions for compiling data from telematics with level III transactional records.	Implement and train fleet coordinators on new WEX solutions for advanced reporting. Work with GSA and DOE to ensure this data can be electronically uploaded into the USDA FMIS (GSA FedFMS), as well as FLEETDASH, for more accurate and expanded reporting in FAST by the end of FY 2017.
Increase acquisitions of zero emission and plug-in hybrid electric vehicles (ZEVs and PHEVs).	No	USDA has minimal electronic vehicle (EV) charging infrastructure to support acquisitions for ZEVs or PHEVs. USDA's geographically decentralized and often remote locations for program delivery would require establishing a robust infrastructure prior to procurement of electric only vehicles. In the interim, USDA has significantly increased its number of hybrid electric and low GHG vehicles acquired in FY 2013 to FY 2015.	
Issue agency policy and a plan to install appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology.	Yes	Work with bureaus to identify opportunities to establish EV charging stations.	Develop plan to install appropriate charging stations at headquarters facilities in DC metro area by the end of FY 2017. Create national policy promoting installations for stations to be ultimately utilized by both government and employee owned vehicles no later than FY 2018.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Optimize and right-size fleet composition, by reducing vehicle size, eliminating underutilized vehicles, and acquiring and locating vehicles to match local fuel infrastructure.	Yes	Established TIGER Team to assess strategic sourcing of vehicle acquisitions against size and utilization of current fleets.	Develop and implement a new total lifecycle model as part of VAM process for each vehicle asset for optimal fleet.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	Established daily feeds for WEX fleet card transactional data into FLEETDASH.	Develop policy on unacceptable "missed opportunities" to use alternative fuel. Develop best practices and training and acknowledgement for good or improved fueling behavior. Ensure data is transferred from WEX to appropriate hierarchical unit in FLEETDASH by the end of FY 2017.
Use a FMIS to track real-time fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	No	Established daily feeds for WEX fleet card transactional data into FMIS for agency-owned, GSA-leased, and commercially-leased vehicles for more accurate FAST reporting.	
Implement vehicle idle mitigation technologies.	No	Research idle "engine cut-off" technologies for further opportunities for mitigation.	
Minimize use of law enforcement exemptions by implementing GSA Bulletin FMR B-33, *Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets.*	No	Continue to minimize use of law enforcements (LE) exemptions per FMR B-33. Each LE determination is assessed via the VAM process.	
Where State vehicle or fleet technology or fueling infrastructure policies are in place, meet minimum requirements.	No	Fleet card use policies are basis for overall fueling requirements that are monitored at the Local and HQ Fleet Program levels.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish policy/plan to reduce miles traveled, e.g. through vehicle sharing, improving routing with telematics, eliminating trips, improving scheduling, and using shuttles, etc.	Yes	Work to increase number of vehicles submitted to both the GSA FedFMS Dispatch & Reservation Model and the Forest Service reservation system under development.	Update policy requiring vehicle sharing and pooling for all light duty passenger vehicles, except when granted an exemption by USDA Fleet, by June 2017. Target is to increase number of vehicles shared/pooled by 2 percent or greater per fiscal year, starting in FY 2017 and continuing through FY 2020.

Goal 6: Sustainable Acquisition
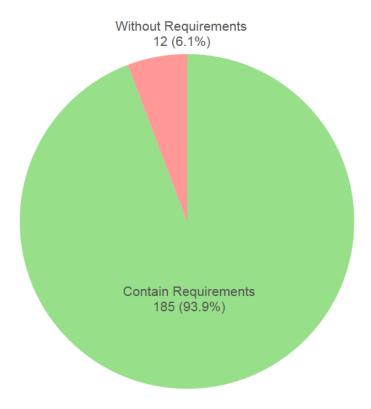
E.O. 13693 section 3(i) requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award and execution phases of acquisition.

Biobased Purchasing Targets

The Agricultural Act of 2014 requires that agencies establish a targeted biobased-only procurement requirement. E.O. 13693 section 3(iv) requires agencies to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

For FY 2017, USDA has established a target of 200 contracts and $2 million in products to be delivered.

**USDA Percent of Applicable Contracts Containing Sustainable Acquisition Requirements
(FY 2015 Goal: 95%)**

Without Requirements
12 (6.1%)

Contain Requirements
185 (93.9%)

Total Number of Contracts Reviewed: 197

Based on agency-reported results of quarterly reviews of at least 5% of applicable contract actions

Figure 11: USDA Percent of Applicable Contracts Containing Sustainable Acquisition Requirements

Since contract reviews started in FY 2011, USDA has consistently improved its compliance scores. In the last two quarters of FY 2015, USDA achieved 95 percent compliance with sustainable acquisition language in applicable contracts. On its BioPreferred and AgLearn websites, USDA continues to revise, publish, and promote sustainable acquisition training, which thousands of USDA employees and contractors have taken. This training, along with dissemination of corrective actions from contract reviews, is largely responsible for USDA's improvement. Training and contract reviews will continue to be priorities in FY 2017.

Sustainable Acquisition Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Establish and implement policies to meet statutory mandates requiring purchasing preference for recycled content products, ENERGY STAR qualified and FEMP-designated products, and BioPreferred and biobased products designated by USDA.	No	Have already established and implemented policies to purchase mandatory products; have reached 95% compliance in applicable contract actions.	
Establish and implement policies to purchase sustainable products and services identified by EPA programs, including SNAP, WaterSense, Safer Choice, and Smart Way.	Yes	Revise online (AgLearn) training to include Safer Choice and SmartWay; 6,500 USDA employees have taken this training, which already includes WaterSense and SNAP. Continue to monitor solicitations via FedBizOpps for Safer Choice, SNAP, and WaterSense language.	(1) Include Safer Choice and SmartWay in online training by the end of 2016. (2) Work with USDA agencies to procure products that are both USDA-biobased and Safer Choice-labeled wherever possible in FY 2017.
Establish and implement policies to purchase environmentally preferable products and services that meet or exceed specifications, standards, or labels recommended by EPA.	Yes	Revise online training and DR-5600 (Environmental Management) to include EPA eco-label recommendations.	(1) Include EPA recommendations in online training by the 2nd quarter of FY 2017. (2)Include recommendations in revised Dept. Regulation by 3rd quarter FY 2017.
Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	Yes	Use government-wide lab equipment and O&M contracts that include sustainable acquisition criteria. Planning process started in FY15.	Deploy contracts as follows: Lab Equipment contracts: FY 2017, Q3, and Building Operations and Maintenance (O&M) contracts: FY 2018, Q1

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure contractors submit timely annual reports of their BioPreferred and biobased purchases.	Yes	Work with contracting officers (CO) to ensure proper Sustainability entries in the Integrated Acquisition System and FPDS.	(1) Conduct four biobased reporting training webinars with CO's by the end of 2016. (2) Track Biobased Reporting module completions on BioPreferred.gov.
Reduce copier and printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer recycled content or higher.	No	We have completed this item.	
Identify and implement corrective actions to address barriers to increasing sustainable acquisitions.	Yes	Use USDA's internal quarterly contract review to address corrective actions.	Send out quarterly review within 3 to 4 weeks of the end of each quarter so that solicitations may be amended, if needed.
Improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS).	No	Address FPDS data quality thru the SAMM workgroup, in collaboration with GSA, who maintains FPDS.	
Incorporate compliance with contract sustainability requirements into procedures for monitoring contractor past performance and report on contractor compliance in performance reviews.	Yes	Include sustainable acquisition compliance into contractor monitoring and performance reviews.	Incorporate compliance with sustainability criteria into contractor performance reviews starting in FY 2017.
Review and update agency specifications to include and encourage products that meet sustainable acquisition criteria.	No	USDA does not have any applicable specifications.	
Identify opportunities to reduce supply chain emissions and incorporate criteria or contractor requirements into procurements.	No	Plan to address supply chain emissions when CEQ issues guidance.	

Goal 7: Pollution Prevention & Waste Reduction

Pollution Prevention & Waste Reduction Goal

E.O. 13693 section 3(j) requires that Federal agencies advance waste prevention and pollution prevention and to annually divert at least 50% of non-hazardous construction and demolition debris. Section 3(j)(ii) further requires agencies to divert at least 50% of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion.

Reporting on progress toward the waste diversion goal will begin with annual data for FY 2016.

Pollution Prevention & Waste Reduction Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C 11001-11023).	No	USDA is reporting according to EPCRA requirements.	
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets.	Yes	USDA will acquire non-toxic alternatives as toxic or hazardous materials are phased out.	USDA will continue to update Chemicals Inventory Plans for individual facilities, especially laboratories, in order to further reduce toxic and hazardous chemicals in FY 2016 and FY 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	USDA's policy is to ensure that all chlorofluorocarbons (CFC) recovery/recycling equipment is certified to EPA standards and venting prohibitions are maintained; to phase out the procurement of ozone-depleting substances (ODS) for non-excepted uses; to maximize the use of safe alternatives to ODS; to ensure that ODS and regulated refrigerants are recovered and recycled, and emissions reduced to the lowest achievable level during the service, maintenance, repair, and disposal of appliances. This policy is codified in Departmental Manual 5600-001, Environmental Pollution Prevention, Control, and Abatement.	(1) Phase out all ODS and buy only Significant New Alternative Program-approved substitutes by FY 2017; (2) Recover and recycle all refrigerants (ongoing); and (3) Reduce all emissions to the lowest achievable level during the service, maintenance, repair, and disposal of appliances (ongoing).
Reduce waste generation through elimination, source reduction, and recycling.	Yes	USDA will continue to practice waste reduction in the following order of priority: source reduction, reuse, recycling, and composting. We will disseminate best practices for accomplishing waste reduction and measure progress through a significant sampling of facilities with contracted solid waste removal.	USDA will achieve 60 percent diversion of non-hazardous solid waste in FY 2016.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.	Yes	USDA will promote and implement integrated pest management (IPM) and sustainable landscaping techniques in USDA-owned buildings throughout the United States. IPM and sustainable landscaping will help create a visually inspiring landscape at USDA facilities across the country and showcase environmentally responsible practices.	USDA will continue to increase awareness of integrated pest management and beneficial landscaping practices through the People's Garden. USDA established over 2400 Peoples Gardens by FY 2015, with a projection of 3200 by the end of FY 2017.
Develop or revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	Yes	USDA continues to reduce toxic and hazardous chemicals and materials through strategies such as acquisition of non-toxic alternatives as outlined in the USDA Sustainable Procurement Plan. The USDA Departmental Regulation (DR) on Environmental Management includes requirements that focus on pollution prevention including source reduction and product substitution. This regulation integrates the goals of the SSPP including GHG reduction goals into USDA policy.	USDA will revise the Environmental Management DR to address Agency Chemical Inventory Plans by the end of FY 2017.
Inventory current HFC use and purchases.	No	The distribution of field offices in USDA (we are located in most of 3,140 US counties) makes the task of full HFC inventory logistically difficult. USDA does maintain inventories in our major government-owned office buildings and labs.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Require high-level waiver or contract approval for any agency use of HFCs.	No	USDA is managing HFCs in accordance with statutory requirements and is not seeking high-level waiver or contract approval.	
Ensure HFC management training and recycling equipment are available.	No	USDA incorporates HFC recycling into O&M contracts for government-owned office buildings and laboratories.	

Goal 8: Energy Performance Contracts

Performance Contracting Goal

E.O. 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. E.O. 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting. USDA's commitment under the President's Performance Contracting Challenge is $38 million in contracts awarded by the end of calendar year 2016. USDA's targets for the next two fiscal years are:

FY 2017: $ 10 million
FY 2018: $ 25 million

USDA agencies will pursue the use of energy performance contracts (EPCs) beyond the President's Performance Contracting Challenge. Specifically, agencies continue to review data from the Energy Independence and Security Act of 2007 (EISA) Section 432 site energy and water evaluations to determine the feasibility of employing the use of EPCs as a follow-up to the site evaluations. USDA's EPC award targets for FY 2017 and FY 2018 listed above are based on the EISA 432 evaluations data, as well as, other planning data. USDA will also continue to employ the use of ENABLE contracts for its smaller facilities.
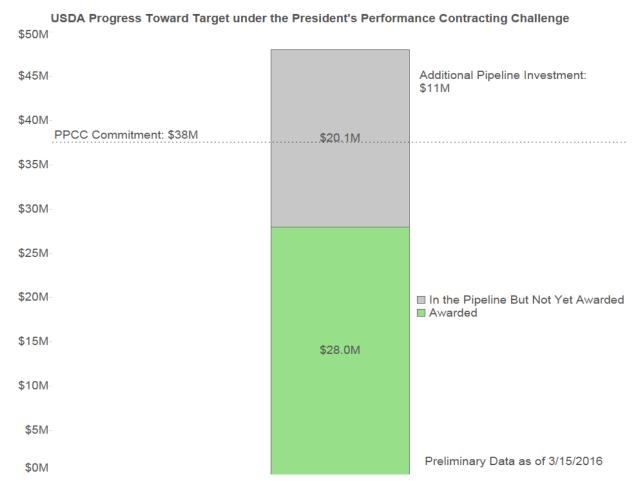

Figure 12: USDA Progress Toward Target under the President's Performance Contracting Challenge

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Performance Contracting Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures.	Yes	USDA will continue to use Performance Contracts to meet energy and water management goals.	(1) Award at least $10 million in EPCs in FY 2017. (2) Award at least $25 million in EPCs in FY 2018.
Fulfill existing agency target/ commitments towards the PPCC by the end of CY16.	Yes	USDA will continue to fulfill its performance contracting commitments under the PPCC.	Meet all performance project milestones as reflected in OMB MAX Collect.
Evaluate 25% of agency's most energy intensive buildings for opportunities to use ESPCs/UESCs to achieve goals.	Yes	USDA will continue to evaluate its most energy intensive facilities for use with energy performance contracts.	Evaluate 25% of USDA's most energy intensive buildings for use with energy performance contracts by the end of FY 2016.
Prioritize top ten portfolio wide projects which will provide greatest energy savings potential.	No	An investment grade audit (IGA) will need to be performed on all facilities in order for a list of top ten energy savings projects to have a high level of accuracy.	
Identify and commit to include onsite renewable energy projects in a percentage of energy performance contracts.	Yes	USDA will continue to explore utilizing performance contracting and other alternate financing mechanisms for installation of renewable energy systems at its facilities.	Install at least two new renewable energy systems at USDA facilities using performance contracting by the end of FY 2017.
Submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.	Yes	USDA will continue to submit proposals for technical or financial assistance to FEMP and/or use FEMP resources to improve performance contracting program.	Submit proposals/applications for FEMP's AFFECT grant program annually.
Work with FEMP/USACE to cut cycle time of performance contracting process, targeting a minimum 25% reduction.	No	USDA will continue to facilitate the performance contracting process in an efficient manner; however, much of the performance contracting process is outside of USDA's control.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure agency legal and procurement staff are trained by the FEMP ESPC/UESC course curriculum.	Yes	USDA will ensure that its relevant legal and procurement staff are trained by the FEMP ESPC/ UESC course curriculum.	Facilitate FEMP ESPC/UESC training for key USDA legal and procurement staff by end of June 2017.

Goal 9: Electronics Stewardship & Data Centers

Electronics Stewardship Goals

E.O. 13693 Section 3(l) requires that agencies promote electronics stewardship, including procurement preference for environmentally sustainable electronic products; establishing and implementing policies to enable power management, duplex printing, and other energy efficient or environmentally sustainable features on all eligible agency electronic products; and employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products.

Agency Progress in Meeting Electronics Stewardship Goals

If your agency cannot track performance agency-wide, do not fill in a percentage. Instead, under status, note "(Agency) does not have agency-wide systems in place to track performance for this goal."

> **Procurement Goal:**
> At least 95% of monitors, PCs, and laptops acquired meets environmentally sustainable electronics criteria (EPEAT registered).
>
> FY 2015 Progress: 98%
>
> **Power Management Goal:**
> 100% of computers, laptops, and monitors has power management features enabled.
>
> FY 2015 Progress: 100% of non-exempt equipment has power management enabled.
>   3% of equipment has been exempted.
>
> **End-of-Life Goal:**
> 100% of electronics disposed using environmentally sound methods, including GSA Xcess, Computers for Learning, UNICOR, U.S. Postal Service Blue Earth Recycling Program, or Certified Recycler (R2 or E-Stewards).
>
> FY 2015 Progress: 100%

Data Center Efficiency Goal

E.O. 13693 Section 3(a) states that agencies must improve data center efficiency at agency facilities, and requires that agencies establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers.

In accordance with the Administration's Cloud First policy, USDA developed a private cloud shared services offering consisting of Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) that serve as the virtual platform for the vast majority of applications at USDA. The USDA Enterprise Data Centers have achieved economies of scale that have driven rate decreases for its private government cloud IaaS and PaaS. For current customers, this equates to substantial savings. This result is primarily due to data center consolidation within USDA as well as growth of non-USDA customers, such as General Services Administration, Federal Acquisition Institute, Health and Human Services, and Office of the Inspector General. USDA was the first Federal agency to offer services on FedRamp.

Electronics Stewardship Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Use government-wide strategic sourcing vehicles to ensure procurement of equipment that meets sustainable electronics criteria.	Yes	USDA will continue procuring computers and tablets with a Blanket Purchase Agreement (BPA) that is based on a GSA government-wide electronics vehicle. All BPA laptops and desktops are EPEAT-registered.	Generate reports on BPA purchases every quarter in FY 2016 and FY 2017 to quantify number of EPEAT-registered computers and tablets purchased.
Enable and maintain power management on all eligible electronics; measure and report compliance.	Yes	Continue monitoring power management (PM) on all eligible electronics. USDA achieved full PM compliance in FY15 through the re-imaging of equipment, as Windows 7 fully replaced Windows XP operating system.	OCIO will generate PM reports semiannually in FY 2016 and FY 2017 to ensure PM compliance.
Implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment; measure and report compliance.	Yes	All new printers and multifunction devices (MFD) installed since FY 2014 have default duplex and monochrome settings. Transition from procurement to leasing of MFDs thru the Managed Print Service (MPS) contract.	(1) Legacy printer/MFDs will be only 25% of inventory by the end of FY 2017. (2) 20% of offices will deploy MPS contracts by the end of FY 2018.
Ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on disposal of electronic assets, and measure and report compliance.	Yes	USDA will continue to handle all excess and surplus property nationwide through the Federal Management Regulation, and utilize R2-certified facilities for recycling, such as the UNICOR plant in Lewisburg, PA. We will continue to use the Agency Asset Management System (AAMS) tracking and reporting tool on GSAXcess website to report compliance.	Track, and report to GSA, 100% of surplus electronics that are donated or recycled in FY 2016 and FY 2017.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Improve tracking and reporting systems for electronics stewardship requirements through the lifecycle: acquisition and procurement, operations and maintenance, and end-of-life management.	No	USDA already reports on all EPEAT purchases, applies power management on all equipment, and uses AAMS to report all excess and surplus property to GSA.	

Data Center Efficiency Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Develop, issue, and implement policies, procedures, and guidance for data center energy optimization, efficiency, and performance.	Yes	USDA has issued and implemented policy for data center energy optimization, efficiency, and performance. This policy is enumerated in the documents "USDA IT Strategic Plan 2014-2018" and "USDA Federal Information Technology Acquisition Reform Act (FITARA) Common Baseline and Implementation Plan."	In FY 2017 and FY 2018, USDA will continue to implement the policies laid out in the strategic documents issued.
Install and monitor advanced energy meters in all data centers (by fiscal year 2018) and actively manage energy and power usage effectiveness.	Yes	All tiered data centers have advanced energy metering.	Install advanced metering in most non-tiered data centers by the end of FY 2018.
Minimize total cost of ownership in data center and cloud computing operations.	Yes	USDA continues to implement "cloud first" and "shared first" strategies in order to maximize efficiency and enhance customer satisfaction regarding performance and price. USDA was the first Federal cloud provider on FedRamp, minimizing our total cost of ownership.	In FY 2017, USDA will continue to leverage Information Technology Strategic Sourcing Plan and other strategic sourcing solutions for common products and services, while continuing to expand cloud service provision to other Federal agencies.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify, consolidate and migrate obsolete, underutilized and inefficient data centers to more efficient data centers or cloud providers; close unneeded data centers.	Yes	Through combined departmental and agency efforts, USDA will close the majority of its underutilized and obsolete data centers. To help accomplish this goal, USDA will continue to offer flexible and cost effective cloud services as an alternative to "server rooms". USDA will work to ensure data center inventory accuracy and pursue actual related cost savings and avoidances.	Close 80% of USDA data centers by the end of FY 2017.
Improve data center temperature and air-flow management to capture energy savings.	No	USDA already implemented energy efficiency in all tiered data centers in consultation with Lawrence Berkeley National Laboratory.	
Assign certified Data Center Energy Practitioner(s) to manage core data center(s).	No	USDA will await further direction from OMB/CEQ on this recommendation.	

Goal 10: Climate Change Resilience

E.O. 13653, *Preparing the United States for the Impacts of Climate Change*, outlines Federal agency responsibilities in the areas of supporting climate resilient investment; managing lands and waters for climate preparedness and resilience; providing information, data and tools for climate change preparedness and resilience; and planning.

E.O. 13693 Section 3(h)(viii) states that as part of building efficiency, performance, and management, agencies should incorporate climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings and the design of new agency buildings. In addition, Section 13(a) requires agencies to identify and address projected impacts of climate change on mission critical water, energy, communication, and transportation demands and consider those climate impacts in operational preparedness planning for major agency facilities and operations. Section 13(b) requires agencies to calculate the potential cost and risk to mission associated with agency operations that do not take into account such information and consider that cost in agency decision-making.

In alignment with the President's Climate Action Plan, the USDA Strategic Plan, USDA policy DR1070-001, and E.O. 13514, 13653, 13677, and 13693, USDA supports activities that help its agencies adapt to and become positioned to meet the vulnerabilities, risks, challenges, and opportunities presented by climate change and variability.

E.O. 13514, *Federal Leadership in Environmental, Energy, and Economic Performance,* outlines Federal agency responsibilities to establish vulnerability and risk assessments in preparation for establishing integrated strategies toward sustainability and make reduction of greenhouse gas emissions a priority for Federal agencies.

E.O. 13677, *Climate-Resilient International Development*, outlines Federal agency responsibilities to safeguard security and economic growth and long-term durability of US development work in vulnerable countries, promote sound decision-making and to systematically factor climate resilient considerations into international development strategies, planning, programming investments, and related funding decisions including management of overseas facilities.

Climate Change Resilience Strategies

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Strengthen agency *external* mission, programs, policies and operations (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	USDA has developed 10 Building Blocks for Climate Smart Agriculture and Forestry, a plan to assist stakeholders to mitigate and adapt to climate change through a range of technologies and practices. USDA Regional Climate Hubs deliver science-based knowledge and practical information to farmers, ranchers and forest landowners within each region. Hubs build capacity within USDA to deliver information and guidance on technologies and risk management practices and work in public-private partnerships to support landscape, watershed, and farm scale conservation and technical assistance for resilience and mitigation. The USDA Climate Hubs Regional Leads Forum began establishment of metrics and targets for successful delivery and guidance at each Hub.	The USDA Building Blocks have established goals and objectives tracking progress in a Building Blocks Update Report that will include sub-agency-specific 3-year goals. For example, from 2016-2018, USDA sub-agencies have agreed to increase enrollment or protection of more than 400,000 acres and reforest more than 300,000 acres and plant 100,000 new trees in urban areas. Each Hub completed Regional Vulnerability Assessments that will be synthesized into a special journal issue of *Climatic Change* by 2017. The Hubs have produced numerous decision support tools available to stakeholders that will be updated and announced periodically on the Climate Hubs websites: http://www.climatehubs.oce.usda.gov/ . Learning and outreach education is being produced regularly to help land managers make climate-informed decisions. Drought risk management and assistance is being developed through the National Drought Resilience Partnership and NIDIS. See https://www.drought.gov/drought/what-nidis/national-drought-resilience-partnership . The drought monitor is updated weekly. Other information is added weekly or monthly to the tools, map, and data. Workshops for improving data accessibility and compatibility and the potential for establishing a National Soil Moisture Network are in progress. To assist the Global Research Alliance the National Ag Library has committed a repository for scholarly publications in climate change research and USDA is investigating additional needs.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Update and strengthen agency *internal* mission, programs, policies, and operations to align with the Guiding Principles, including facility acquisition, planning, design, training, and asset management processes, to incentivize planning for and addressing the impacts of climate change.	Yes	USDA regularly updates conservation and technical assistance programs essential to the Building Blocks project. Many of these programs are focused either directly or indirectly on incentives that address the impacts of climate change adaptation and provide both direct and ancillary environmental benefits through Farm Bill authorities. The Forest Planning Rule for national forests and grasslands was the first in more than a generation to be implemented to guide management of the National Forest System. Permanent placement of the USDA Regional Climate Hubs within the Department organization is streamlining cost centers, funding, and management of the Hubs.	To improve data collection on conservation management programs specific to adaptation and their adoption rates, a new effort tentatively titled 'Conservation Indicators' will release a biennial national report on conservation trends by year and region. Progress measured is annually entered into a USDA GHG database. The most recent published edition is: U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990-2013, Climate Change Program Office, Office of the Chief Economist, U.S. Department of Agriculture. Technical Bulletin No. 1943, August 2016. As an example from Forest Service policy updates, as a result of the first Forest Planning Rule in a generation, the Forest Service reduced hazardous fuels on 1.6 million acres and sustained or restored more than 3.1 million acres in 2015. USDA has updated its Departmental Regulation on guidance for establishment and periodic revision of climate change adaptation. See http://www.usda.gov/oce/climate_change/adaptation/DR1070_001USDAPolicyStatement_062015.pdf The latest directive establishes guidance to integrate climate change adaptation into sub-agency planning, implementation and performance. Metrics developed in the Building Blocks Update reports (http://www.usda.gov/oce/climate_change/building_blocks/BuildingBlocksImplementationPlanProgressReport.pdf) which establishes regular reporting by each sub-agency to evaluate annual progress and the costs associated with accomplishment where possible, and to provide accessible information to producers in the form of action lists as expected accomplishment. Sub-agencies will communicate as part of the annual budget process any adjustments necessary to carry out actions.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Update emergency response, health, and safety procedures and protocols to account for projected climate change, including extreme weather events.	No	Response to emergencies, health and safety procedures and protocols are accounted for through other mission areas within agency operations. Departmental Management manages USDA overall procedures and protocols, including USDA's involvement on the interagency National Response Team, and the Forest Service coordinates Federal wildfire response.	

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	USDA Regional Climate Hubs integrate science-based knowledge and practical information on a regional level in coordination with other Federal agencies and partners. Training courses developed by USDA sub-agencies and other Federal agencies are linked on Hub websites. USDA Building Blocks for Climate Smart Agriculture and Forestry, a USDA sub-agency partnership, is focused on concentrating multiple economic benefits from different sub-agencies to meet producer needs, is voluntary, incentive-based, cooperative, and focused on building partnerships among many entities both public and private. These Building Blocks are expected to provide ancillary benefits to resiliency and regional planning.	USDA Regional Climate Hubs continually integrate science-based knowledge and practical information and risk assessment to address some of the more vulnerable populations and at-risk groups on a regional geographic basis in coordination with other Federal agencies. Several USDA sub-agencies require training of employees and the Federal adaptation community is considering developing courses for all Federal SES. Building Blocks integrate actions from several USDA agencies with private-public partnerships. Those of particular interest to resiliency include Soil Health, Conservation of Sensitive Lands, Grazing and Pastures, Stewardship of Federal Forests and Energy Generation and Efficiency and have 2016-2018 target goals listed in the Building Blocks Update Report http://www.usda.gov/oce/climate_change/building_blocks/BuildingBlocksImplementationPlanProgressReport.pdf and methods for progress reporting initiated. The Building Blocks benefits are expected to reduce net emissions and enhance sequestration by 120 million metric tons per year and at the same time provide ancillary benefits to resiliency and regional planning.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Ensure that vulnerable populations potentially impacted by climate change are engaged in agency processes to identify measures addressing relevant climate change impacts.	Yes	USDA is identifying vulnerable communities using the Priority Agenda produced by the Climate Natural Resources Working Group (CNRWG). CNRWG was established by the Council on Climate Preparedness and Resilience, of which USDA is a member. USDA Environmental Justice Committee has recently updated its 2016 strategic initiatives related to climate change with similar objectives. USDA outlined many of the factors that increase vulnerability and those that enhance resilience to climate change in a "Rural Communities Workshop Technical Report." This report formed the basis for a chapter in the 2014 National Climate Assessment. The USDA has also established Regional Climate Hubs that specialize in delivery of science-based information to all, especially underserved and vulnerable communities, tribes, and individuals. The Climate Hubs Tool Shed links various tools for users by agricultural sector: http://www.climatehubs.oce.usda.gov/content/tools-and-data	Vulnerability Assessments have been completed for each USDA Regional Climate Hub to support local and regionalized efforts to address some of the more vulnerable populations and consider risk assessment for at-risk groups on a geographic basis: http://www.climatehubs.oce.usda.gov/content/regional-vulnerability-assessments. These assessments are expected to be published Fall 2016 in a special journal issue of *Climatic Change* to facilitate wider distribution in local and regional communities. Adaptation Plans for each USDA agency are regularly reviewed and updated annually or bi-annually. The next Adaptation Plan update is expected in spring 2017 in accordance with Council on Environmental Quality guidance. USDA is continuing to add tools and materials to sections on Food Production, Drought, Carbon Storage, and Crops. For example, a 2015 publication 'Climate Change, Global Food Security and US Food System" addresses the link between at-risk populations in the context of geographic, economic, and social constraints: http://www.usda.gov/oce/climate_change/FoodSecurity.htm.

Strategy	Priority for FY 2017	Strategy Narrative	Targets and Metrics
Identify interagency climate tools and platforms used in updating agency programs and policies to encourage or require planning for, and addressing the impacts of, climate change.	Yes	USDA adds tools and platform applications to the interagency Climate.gov website https://www.climate.gov/ and the Climate Resilience Toolkit https://toolkit.climate.gov/ an interagency site to assist planning for and addressing impacts of climate change. The USDA Regional Climate Hubs 'Climate Hubs Tool Shed' links various tools by agricultural sector: http://www.climatehubs.oce.usda.gov/content/tools-and-data	With input from stakeholders, the USDA Regional Climate Hubs continues to add tools relevant at local and regional scales. An example is the recently released 'Climate Hubs Tool Shed' http://www.climatehubs.oce.usda.gov/content/tools-and-data to assist agricultural and forest land managers to adapt to climate variability and change. The next National Climate Assessment (NCA4) is planning to include regional downscaling. USDA Regional Climate Hubs will be surveying stakeholders for their input to target this effort in FY17. The National Soil Moisture Network developmental phase is progress. An interagency workshop in May 2016 emphasized coordinating and assimilating activity across the federal, state, and private sectors. An example coordinating effort: Equipment for at least 70 new citizen science weather stations has been purchased by USDA and will be installed in 2016 and 2017 in areas with geographic gaps in precipitation data instrumentation. NOAA will supervise the citizen contributions.

APPENDICES

Appendix A:

FY 2016 FLEET MANAGEMENT PLAN AND BUDGET NARRATIVE

U.S. DEPARTMENT OF AGRICULTURE

(A) Introduction that describes the agency mission, organization, and overview of the role of the fleet in serving agency missions.

(1) Briefly describe your agency's primary/core mission and how your fleet is configured to support it.

U.S. Department of Agriculture (USDA) provides leadership on food, agriculture, natural resources, rural development, nutrition, and related issues based on sound public policy, the best available science, and efficient management.

USDA's primary/core mission is to expand economic opportunity through innovation, helping rural America to thrive; to promote agriculture production sustainability that better nourishes Americans while also helping feed others throughout the world; and to preserve and conserve our Nation's natural resources through restored forests, improved watersheds, and healthy private working lands.

For additional information on the agency's primary/core mission, please refer to the Secretary's Strategic Plan FY 2010 to 2015 at http://www.ocfo.usda.gov/usdasp/sp2010/sp2010.pdf.

The percentage of alternatively-fueled vehicles continues to trend upward as USDA met its targeted goal of 75% of its covered light-duty vehicles acquired were alternatively-fueled vehicles. To achieve the optimal fleet attainment, USDA will continue to reduce the number of conventional fuel vehicles and increase the percentage of light duty alternative fuel and low GHG vehicles in its inventory. In addition, agencies will assess vehicles that are older, less efficient, high maintenance and/or under-utilized. To date, USDA agencies switched over 800 sub-compact and compact sedans GSA replacement orders to electric hybrid by fully participating in the GSA Hybrid Electric Pilot Program.

USDA has also embarked upon an agency-wide strategic sourcing initiative that has included an in-depth assessment of all fleet related acquisitions and vehicle utilization to determine how best to right-size fleet, while incurring cost savings. To accomplish these goals, the Agriculture Strategic Sourcing - Fleet Category Team was established to develop a total cost model to be used as part of VAM to determine effective procurement methods for each reportable motor vehicle acquisition. Additionally, a memorandum of agreement between USDA and GSA was created for the transition of approximately 3,400 owned vehicle assets to the GSA Leased Fleet Program.

(2) Please describe the organizational structure and geographic dispersion of your fleet.

USDA owns and operates slightly over 40,000 vehicles, mostly light trucks and sedans, located in cities, rural communities, and National Forests all across the country.

These vehicles are used to support the departments' extensive and varied missions, including food safety inspections, agricultural research, fire suppression, and law enforcement. The complexity of USDA

mission requirements and the overall size and nationwide dispersion of the fleet make meeting and striving to exceed federal target goals a challenging effort that requires the commitment of all our agency fleet managers.

(3) Describe how vehicles are primarily used, and how do mission requirements translate into the need for particular vehicle quantities and types.

USDA fleets are primarily shared among employees at the assigned office or program unit location. Vehicles may be assigned to individuals based on job classification when mission required. For instance, for agencies such as the Food Safety and Inspection Service (FSIS) and Office of the Inspector General (OIG), each agent or inspector may be assigned a leased vehicle or GOV based on job series. Additionally, OIG maintains several surveillance vans with special equipment that are unassigned and ready specifically for use as needed for investigatory purposes.

Mission requirements ultimately define the need for a particular vehicle and its quantity. In conjunction with mission needs, each current or newly acquired vehicle asset is run through an agency level VAM and total costing model to verify it falls within sufficient utilization rates, right-sizing efforts, and executive order compliance.

(B) Description of vehicle acquisition/replacement strategies.

(1) Describe your agency's vehicle sourcing strategy and decision(s) for purchasing/owning vehicles compared with leasing vehicles through GSA Fleet or commercially.

USDA vehicle sourcing strategies for purchasing owned verses leasing vehicles through GSA or commercially is based on VAM and a total cost model developed as part of the Agricultural Strategic Sourcing Initiative. Each vehicle asset requested will be assessed using the total cost model to determine the most effective method of acquisition, as well as assessed for compliance to GHG emissions reduction and utilization goals. When comparing the cost of owned vehicles to leased vehicles, the following direct and indirect costs are projected for the lifecycle of owned vehicles to the total lease costs over an identical lifecycle:

FAST Reportable Motor Vehicle Inputs	
SIN	
Est Life (yrs)	
Annual Mileage	
Purchase Price	$
Program Mgmt FTE per Lease Vehicle	$
Program Mgmt FTE per Owned Vehicle	$
Budget Clearing funds or Existing Sales Proceeds to be applied to purchase	$
Monthly Rate	**$**

Expense Type	Owned
Monthly Rate	$
Mileage Rate/Mile	$
Upfitting Cost	$
Lease Equipment Rate/Month	
Agency Incurred Expenses Month	
AFV Surcharge	
Additional AIE/Month (Docs Required)	
Program Management/Month	
Monthly Cost	$
Annual Cost	$
Lifecycle Cost	**$**

Annual Maintenance Inputs	
Safety Inspections Cost	$
Safety Inpsection Interval/yr	
Oil Change Cost	$
Oil Change Mileage	
Fuel Cost per Gallon	$
Miles Per Gallon	
Vehicle Wash Cost	$
Vehicle Wash Quantity/yr	
Tire replacement cost	$
Tire replacement mileage	
Scheduled Maintenance Cost/yr	$
Unscheduled Repairs Cost/yr	

Mileage Rate Calculation	
Safety Inspections/mile	$
Oil Changes/mile	$
Fuel/mile	$
Vehicle Wash/mile	$
Tires/mile	$
Scheduled Maintenance/mile	$
Unscheduled Repairs/mile	$ -

While cost savings and mandated compliance are driving forces behind vehicle acquisition decisions, the ultimate motive for acquiring vehicles from other than the most cost effective source is mission need.

(*2) Describe your agency's plans and schedules for locating AFVs in proximity to AFV fueling stations.*

USDA requires AFVs are requested when there is E85 fuel located within 5 miles or 15 minutes of the garaged zip code of the GOV. When E85 is not available, agencies are encouraged to purchase low greenhouse emission sub-compact gasoline sedans. If a compact sedan is required, agencies are encouraged to requests low greenhouse emissions hybrid compact sedans. Larger vehicles are requested if they are mission essential due to an official reasonable accommodation or severe weather/terrain where GOV is operated.

USDA fleets have not planned to acquire/lease a significant percentage of zero emission passenger vehicles in 2016. The main reason is the lack of, or access to, a charging station infrastructure that can accommodate transport between remote locations for program delivery. Additionally, USDA fleets consist of specialized mid to heavy duty vehicles that are driven off-road on various terrains where charging is not a viable option. These vehicle types are often not available as zero emission vehicles.

(C) Description of Telematics related acquisition strategies.

(1) EO13693 requires agencies to incorporate telematics into the fleet. Describe your agency's plans to meet this goal.

USDA is currently assisting it agencies in researching telematics vendors, including recent GSA telematics offers. Starting in June, USDA is organizing several national forums with GSA and private vendors to discuss opportunities for telematics on light duty and mid-size vehicles. The ultimate goal is

to find a telematics system that can be integrated with USDA's level three fleet card transactional data and use of driver pins currently provided by WEX.

(2) If funding is required to comply with this mandate, do you have documentation that it has been requested? (Do not attach or provide funding documentation unless requested).

No documentation.

(3) Has the agency acquired the telematics system through GSA or directly from a vendor/company?

To date, several agencies such as the Natural Resources Conversation Service and the Office of Operations have made investments into the technology by piloting and/or permanently installing telematics on their vehicles through a private vendor. Forest Service is in the process of pilot planning and researching vendors and FSIS will acquire approximately 605 vehicles in 2017 that will be outfitted with a telematics system. Since all vehicles are leased from GSA, FSIS is waiting for guidance from GSA and the Department on the type of system that will be used, how it will installed and billed to the Agency and the type of information that will provided by their reporting features.

If so, provide the name of the vendor/company: Trimble Navigational, Inc.

Did the costs of telematics systems acquired directly from the vendor/company exceed those provided through GSA?

No. Current GSA telematics offer(s) were not available at the time.

If so, please provide rationale for the decision.

(4) Describe the type of telematics technology installed (satellite, cellular or radio frequency identification (RFID).

Satellite and cellular back up.

(5) What type of telematics features are installed in your vehicles. Check all that apply from the list below: (Note – When the form is finalized, there will be check boxes or drop down box included on the template)

<u>GPS tracking</u> - Fleet managers can monitor the location of their vehicles in real-time by logging on to a user accessible website. **Yes**.

<u>Engine diagnostics</u> - Fleet managers can have engine diagnostics reports delivered to their email showing the current condition of the vehicle, odometer readings, idle time, emissions information and speed data. **Yes**.

<u>Vehicle monitoring and driver identification</u> - Fleet managers can track a driver of every vehicle via the usage of key fobs for the drivers or in-vehicle devices and can track who is, or was, driving any given vehicle at any particular time, as well as limit who can operate which vehicles. **Yes via fob key**.

<u>In-vehicle recording</u> – This solution uses inward and outward facing cameras to record the driver's behavior as well as the vehicle's surroundings. The device saves the footage from several seconds before and after a sudden movement occurs, such as sudden stop or hard turn. **No**.

Instant driver feedback – This system provides an immediate, private, in cabin indication via light activation within the driver's line of sight. The feedback device is designed to track and report harsh breaking, sudden acceleration, cornering/high speed turns, unsafe lane changes and speeding (with a pre-determined speeding threshold). **Yes**.

Other – Describe other service

Fuel Usage - Information on gallons of fuel and subsequent MPG calculations. **Yes**.

(6) Describe the obstacles encountered, lessons learned, and any experiences or other information that may benefit other agencies. Consideration should be given to the impact that aftermarket telematics may have on vehicle warranties.

(D) Description of efforts to control fleet size and cost

(1) Provide an explanation for any measurable change in your agency's fleet size, composition, and/or cost or if you are not meeting optimal fleet goals (based on agency VAM study results).

There has been a concerted effort to centralize the vehicle acquisition approval process. This effort has assisted in controlling fleet size and cost in the following manner:

a. GSA lease replacement vehicles and additional orders must receive HQ approval before the order is placed.

b. GSA Field Service Reps will not to place sedan orders larger than sub-compact, without HQ approval, unless compact hybrid is ordered.

c. Every vehicle acquisition will go through a documented VAM approval process and total cost model prior to placing the order with GSA.

Pending system changes to AutoChoice, USDA hopes to replicate the same centralized acquisition approval process for GSA Lease replacements at the departmental level for its owned vehicle purchased.

(2) Describe the factors that hinder attainment of your optimal fleet (e.g., budgetary, other resource issues, mission changes, etc.).

Budgetary resources to implement new compliance mandates.

(3) Discuss any trends toward larger, less fuel-efficient vehicles and the justifications for such moves.

None.

(4) Are you aware of and do you consider alternatives (short term rental, pooling, public transportation, etc.) to adding a vehicle to the agency's fleet?

Pooling is prime alternative option.

(5) Discuss the basis used for your future cost projections (published inflation estimates, historical trends, flat across-the-board percentage increases, mission changes, etc.)

Combination of factors, primarily mission changes, inflation estimates and historical trends.

(E) Description of Vehicle Assignments and Vehicle Sharing.

(1) Describe how vehicles are assigned at your agency (i.e., individuals, offices, job classifications, motor pools).

Primarily offices/ program, then by job classification, motor pools.

USDA does not promote the acquisition of vehicles for individuals, except when justified. Justification often pertains to top security, job classification or reasonable accommodation. Larger owned fleets like NRCS and the Animal, Plant Health and Inspection Service tend to be assigned by office/program. While leased fleets like FSIS and OIG tend to be job classification assigned.

(2) Describe your agency's efforts to reduce vehicles assigned to a single person wherever possible.

Offices with 1:1 vehicle to employee ratio or higher should be flagged for further assessment.

(3) Describe pooling, car sharing, and shuttle bus consolidation initiatives as well as efforts to share vehicles internally or with other Federal activities.

(4) Describe how home-to-work (HTW) vehicles are justified, assigned, and reported, as well as what steps are taken by your agency to limit HTW use.

Home-to-work vehicles are justified in accordance with USDA Departmental Regulation 5400-005, which also considers job series as a major determining factor. The distance to a program office in relationship to the field location is also a consideration. Some law enforcement (LE) vehicles are also assigned to specific LE officers and agents with the type of vehicle depending on type of officer. For instance, most Office of Inspector General officers and agents are granted home-to-work (HTW) permission through their Regional Special Agent in Charge, as they must be available (on call) to handle investigations at any time. USDA Fleet has recently automated a standard process for maintaining records on individual HTW agreements.

(5) Does your agency document/monitor the additional cost of HTW use of Federal vehicles? If so, please describe how.

No.

(F) Evidence of Vehicle Allocation Methodology (VAM) Planning.

Provide information on the methods used to determine your agency's VAM targets/optimal inventory. (Recommendation #2 from GAO report: GAO-13-659. See FMR Bulletin B-30 for guidance on conducting a VAM study and developing VAM targets).

(1) What is the date of your agency's most recent VAM study?

USDA most recent VAM study was performed June, including a utilization study October of 2015.

Please describe the results (Add/Reduce/Change vehicle types, sizes, etc.). Have all bureaus been studied?

All USDA agencies were studied. USDA acquired the services of A.T. Kearney to perform an extensive VAM of the entire fleet that assessed all aspects as defined in GSA BULLETIN FMR B-30.

Oct 2015 - 2,785 USDA vehicles had zero miles reported with the last 12 months prior to study. 13,971 USDA vehicle had less than 4,000 miles reported in last 12 months prior to study (10,025 were light duty vehicles).

(2) From your most recent VAM study, please describe/provide the specific utilization criteria (miles, hours, vehicle age, or other measures) used to determine whether to retain or dispose of a vehicle?

Motor Vehicle Type	Years	or Miles
Sedans/Station Wagons	3	60,000
Ambulances	7	60,000
Buses:		
Intercity	n/a	280,000
City	n/a	150,000
School	n/a	80,000
Trucks		
Less than 12,500 pounds GVWR	6	50,000
12,500-23,999 pounds GVWR	7	60,000
24,000 pounds GVWR and over	9	80,000
4- or 6-wheel drive motor vehicles	6	40,000

(3) From your most recent VAM study, what were the questions used to conduct the VAM survey (see FMR Bulletin B-30(6)(C)) (if lengthy, provide as an attachment)?

See attachment.

If different questions were used by different bureaus or program areas, provide the questions for each. If a VAM survey was not conducted, please describe the methods used to apply utilization criteria to each vehicle in your agency's fleet and collect subjective information about each vehicle that potentially could provide valuable insights/explanations into the objective criteria.

(G) Description of the agency-wide Vehicle Management Information System (See FMR 102-34.340)

Federal agencies are to begin collecting asset level data (ALD) beginning October 1, 2016 in order to be able to report ALD in the October-December 2017 FAST data call. To comply, your agency will need a management information system (MIS) capable of reporting inventory, cost, usage, and other information on a "per vehicle" basis.

(1) Does your agency have a vehicle management information system (MIS) at the Department or Agency level that identifies and collects accurate inventory, cost, and use data that cover the complete lifecycle of each motor vehicle (acquisition, operation, maintenance, and disposal), as well as provides the information necessary to satisfy both internal and external reporting requirements?

USDA department uses GSA FedFMS and total cost tool for complete lifecycle reporting.

(2) Your agency was provided a draft list of 70 ALD data elements. How many of the 70 data elements is your current system able to report on a "per vehicle" basis right now?

Approximately 65 to 67 data elements per vehicle can be compiled from multiple sources, such as Autochoice, WEX fleet card, FMVRS, etc. for reporting.

(3) Describe your agency's plan for reporting all required ALD elements.

Currently working with agency level fleet managers to locate best data sources. May need to create in house database to compile data from multiple sources.
What is the timeline? October 2017 FAST reporting.

(4) If your agency does not currently have a system capable of reporting ALD, describe the steps (documented) that are being taken or have been taken to comply with Executive Orders, regulations, and laws that require such a system.

Will need to create in house database to compile data from multiple sources.

(5) If your agency currently uses telematics systems, does your MIS capture and report all of the data from those devices?

No.

(H) Justification for restricted vehicles.

(1) If your agency uses vehicles larger than class III (midsize), is the justification for each one documented?

Documentation recorded at individual agency level.

(2) Does your agency use the law enforcement (LE) vehicle classification system described in GSA Bulletin FMR B-33? If not, why not?

Yes.

(3) If your agency reports limousines in its inventory, do they comply with the definition in GSA Bulletin FMR B-29?

N/A

(4) For armored vehicles, do you use the ballistic resistance classification system of National Institute of Justice (NIJ) Standard 0108.01, and restrict armor to the defined types?

No.

(I) Impediments to optimal fleet management.

(1) Please describe the obstacles your agency faces in optimizing its fleet.

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Employees who are high mileage drivers and using their POV for official business find that the reduced reimbursement rates are no longer sufficient and they request a government vehicle. This increases fleet size but it is the most advantageous to the government because it is less expensive to have them in a government vehicle rather than pay them reimbursement to use their POV.

(2) Please describe the ways in which your agency finds it hard to make the fleet what it should be, operating at maximum efficiency.

AutoChoice should provide more flexibility for agency departmental level approval of orders and reporting capabilities. AutoChoice should mirror GSA Drive Thru – CAM system for questioning E.O. compliance before order can be placed.

(3) If additional resources are needed, (such as to fund management information system implementation or upgrades, or to acquire ZEVs, or LGHG vehicles, or install alternative fuel infrastructure) have they been documented and requested?

No.

(4) Describe what specific laws, Executive Orders, GSA's government-wide regulations or internal agency regulations, budget issues, or organizational obstacles you feel constrain your ability to manage your fleet. Be specific and include examples. If you have a solution, describe it and indicate whether we can share the solution with other agencies as a potential best practice.

We have no obstacles to report.

(J) Anomalies and possible errors.

Armored vehicle with low operating costs due to protective stationary presence of vehicle overseas.

(K) Summary and contact information.

(1) Who should be contacted with questions about this agency fleet plan? (Provide the name and contact information for the agency headquarters fleet manager and the person preparing this report if different)

Rhea Jack

USDA Fleet Manager

Rhea.jack@dm.usda.gov

202-720-8616

(2) Indicate whether the budget officer participated in the VAM and A-11 processes. (Provide the name and contact information for the budget office reviewing official). Budget Officer participates in A-11 process via August reporting.

TBD

(3) Indicate whether the Chief Sustainability Officer participated in the VAM, vehicle planning, and vehicle approval processes. (Provide the name and contact information for the CSO reviewing official).

Malcom A. Shorter

USDA CSO

Malcom.shorter@osec.usda.gov

Appendix B:

VEHICLE ALLOCATION METHOD (VAM)

CURRENT FLEET SUMMARY			# Agency-Owned	# Comm-Leased	# GSA-Leased	# Total Vehicles	% of Mix
	Conventional	Buses	73	0	12	85	0
		HD Vehicles	2,350	0	38	2,388	10
		LD Trucks 4x2	2,909	0	133	3,042	13
		LD Trucks 4x4	8,757	14	564	9,335	39
		MD Vehicles	6,467	0	324	6,791	29
		Sedans/St Wgns	384	8	1,677	2,069	9
			20,940	22	2,748	23,710	
	Alternative Fueled						
		LD Trucks 4x2	2,779	1	540	3,320	20
		LD Trucks 4x4	7,721	0	888	8,609	51
		LSEVs	4	0	0	4	0
		MD Vehicles	1,325	6	352	1,683	9
		Sedans/St Wgns	1,261	2	1,986	3,249	19
	Subtotal		13,090	9	3,766	16,865	
		Total	34,030	31	6,514	40,575	

PLANNED 2016 VAM SUMMARY						
			# Agency-Owned	# Comm-Leased	# GSA-Leased	# Total Vehicles
	Conventional					
		Buses	73	0	12	85
		HD Vehicles	2,352	0	37	2,389
		LD Trucks 4x2	2,369	(1)	355	2,723
		LD Trucks 4x4	8,127	16	1,129	9,272
		MD Vehicles	6,407	0	348	6,755
		Sedans/St Wgns	337	8	1,787	2,132
			19,665	23	3,668	23,356
	Alternative Fueled					
		HD Vehicles	2,779	1	540	3,320
		LD Trucks 4x2	7,225	0	1,157	8,382
		LD Trucks 4x4	(670)	0	985	315
		MD Vehicles	1,312	5	390	1,707
		Sedans/St Wgns	1,135	2	2,046	3,183
	Subtotal		11,781	8	5,118	16,907
		Total	31,446	31	8,786	40,263

PROJECTED 2017 VAM SUMMARY						
			# Agency-Owned	# Comm-Leased	# GSA-Leased	# Total Vehicles
	Conventional					
		Buses	73	0	12	85
		HD Vehicles	2,352	0	37	2,389
		LD Trucks 4x2	2,302	(1)	396	2,697
		LD Trucks 4x4	7,779	16	1,322	9,117
		MD Vehicles	6,404	0	351	6,755
		Sedans/St Wgns	247	8	1,798	2,053
			19,157	23	3,916	23,096
	Alternative Fueled					
		HD Vehicles	2,779	1	540	3,320
		LD Trucks 4x2	7,098	1	1,266	8,365
		LD Trucks 4x4	(1,207)	0	1,459	252
		MD Vehicles	1,288	5	409	1,702
		Sedans/St Wgns	1,151	4	2,081	3,236
	Subtotal		11,109	11	5,755	16,875
		Total	30,266	34	9,671	39,971

FORECASTED 2018 VAM SUMMARY						
			# Agency-Owned	# Comm-Leased	# GSA-Leased	# Total Vehicles
	Conventional					
		Buses	82	0	16	98
		HD Vehicles	2,331	0	41	2,372
		LD Trucks 4x2	2,440	(1)	407	2,846
		LD Trucks 4x4	7,706	16	1,341	9,063
		MD Vehicles	6,370	0	401	6,771
		Sedans/St Wgns	201	8	1,799	2,008
			19,130	23	4,005	23,158
	Alternative Fueled					
		HD Vehicles	2,779	1	540	3,320
		LD Trucks 4x2	7,080	1	1,338	8,419
		LD Trucks 4x4	(773)	0	1,675	902
		MD Vehicles	1,466	2	412	1,880
		Sedans/St Wgns	1,130	4	1,931	3,065
	Subtotal		11,682	11	5,896	17,589
		Total	30,812	34	9,901	40,747

Appendix C:

USDA MULTIMODAL ACCESS PLAN

Executive Order (E.O.) 13693, *Planning for Federal Sustainability in the Next Decade*, requires Federal agencies to develop, promote, and implement sustainable commuting and workplace policies and practices for employees. The MAP's purpose is to set the stage to form the U.S. Department of Agriculture (USDA) policy around multimodal workplace access, to identify present-day successes and challenges, and to encourage specific practices in the field.
Relevant practices include:

- Workplace Electric Vehicle Charging;

- Bicycling, walking to the workplace, and other forms of active commuting;

- Telecommuting and Teleconferencing expansion; and

- Incentivized Carpooling and use of Public Transportation.

The USDA MAP framework includes the above four modes of access, gives cases where these modes are used, as well as details on agency strategies. USDA builds its MAP on internal agency strategies and experience. Agencies are responsible to meet mission, as their top priority. USDA agencies use their initiative and discretion in encouraging sustainable commuting and workplace travel strategies, in putting infrastructure in place as required, and in giving incentive to agency staff.

I.   Workplace Electric Vehicle Charging

Overview

USDA fully supports use of Electric and Plug-in Hybrid Electric Vehicles (EVs and PHEVs), and is encouraged to support employee use of EV charging facilities for personal vehicles as appropriate. The use of EVs and PHEVs supports E.O. 13693 "Planning for Federal Sustainability in the Next Decade." Section 10 of the EO requires that within 180 days of the Order, Federal government agencies address sustainable operations of fleet vehicles, including using and sharing infrastructure and logistical resources to support the adoption and use of alternative fuel vehicles such as EVs and PHEVs.
EV charging infrastructure may help to reduce Scopes 1 and 3 GHG emissions associated with fleet operations and with commuting. See Figure 1, below, for an explanation of the three Scopes of GHG emissions.
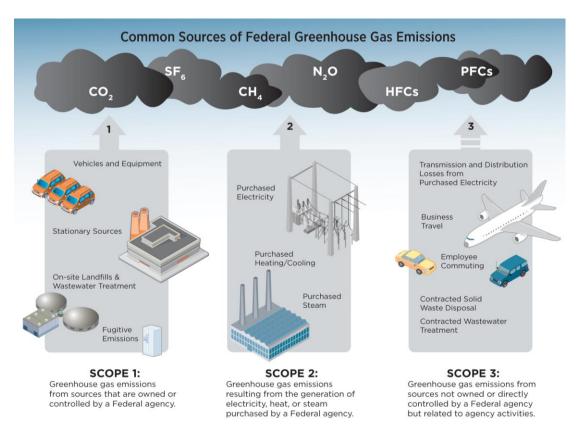
**Figure 1: Sources of Federal GHG Emissions
from: femp.energy.gov**

Factors to Consider

USDA agencies, in order to successful deliver their programs, are at remote locations throughout the U.S. It is essential to Scope 3 GHG emissions reductions that employees at USDA office and research locations serving the seven USDA mission areas are able to commute to and from these remote locations using the most environmentally beneficial transportation means.

Challenges

Expanding the percentage of EVs and PHEVs in Government fleets and installing charging stations may present challenges across USDA, due to unique agency missions and remote locations of program delivery. Also, USDA needs more information on costs, benefits, and regulatory boundaries around the use of charging infrastructure.

Not all agencies are currently operating EVs and PHEVs as part of their fleet and using EV charging stations. Providing policy guidance about incidental costs of electricity will encourage agencies to expand the use of EVs and PHEVs, and EV charging stations, and clarify how to appropriately make them available to support employee commuting.

Moving Forward

The use of EVs, and the availability of charging stations at departmental facilities, helps USDA to achieve Scope 3 GHG emissions reductions goals and ultimately will help to enhance employee work/life effectiveness.

USDA planned actions include encouraging agencies to:

- Identify the costs, benefits, and regulatory boundaries around the installation, operation & maintenance, and use of charging infrastructure, including cost of electricity;

- Consider offering EV charging benefits as worker incentives equated to the public transportation benefits presently offered; allow Federal employees access to using existing charging infrastructure to charge vehicles without cost, as long as this use does not interfere with or impede access to the equipment by Federal fleet vehicles;

- Acquire EVs and PHEVs as a key component in improving agency fleet and vehicle efficiency and management; in acquisition, explore financing options and seek agency purchasing incentives, encouraging the GSA to make more EV's available on-schedule, in a cost-competitive manner as compared to combustion engine vehicles;

- Formally determine, on a case-by-case basis, whether allowing Federal employees to charge their own vehicles using existing Federal government EV charging infrastructure, such as electrical outlets or charging stations, is incidental to the operation of a government parking facility;

- Appropriately provide access to Federal government EV charging infrastructure for employees' personal vehicles without cost, in the event that employee use is found to be incidental, consistent with principles of Federal appropriations law;

- Expand the EV charging infrastructure, identifying locations where EVs are a feasible addition to existing fleets as well as locations where EV charging stations can be used for privately owned vehicles, and install, operate, and maintain charging infrastructure in Federal agency parking areas.

Summary

USDA will continue to fully support the use of EVs, and looks forward to collaborating with Federal agencies as guidance is developed. The use of these vehicles in USDA's fleet helps reduce Scope 1 greenhouse gas (GHG) emissions. The use of EVs and PHEVs by employees helps reduce Scope 3 GHG emissions depending upon the power generation fuel sources, and will expand upon the available EV network, especially in remote locations.

II.   Active Commuting

Overview

USDA supports employee active commuting programs including bicycling or walking to work. Active commuters reduce both the carbon footprint and traffic congestion, as they simultaneously attain numerous health benefits such as reducing stress, maintaining a healthy weight, and strengthening bones and muscles. With effective and sound active commuting policy, USDA's carbon footprint is reduced as employees' well-being is increased.

Factors to Consider

Employees may need to use other means of transportation than bicycling or walking to work when seasonal precipitation and extreme temperature interfere. Furthermore, biking or walking to work may not be a viable or safe practice at some USDA offices and research locations. USDA locations are widely geographically dispersed throughout the U.S. The active commuting policy must take into account alternate modes of transportation as they are available, such as public transit and carpools, and it is important that agencies continue to make offer transit benefits to bicycling and pedestrian commuters.

Active Commuting Success Stories

- The USDA headquarters South, Whitten, and Forest Service Yates Buildings, include several bicycle storage locations; the South Building bicycle racks fit approximately 65 bicycles. At the USDA headquarters complex, there are 10 bicycle-sized lockers in a parking lot, and 18 small bicycle lockers to store accessories such as helmets and gear. The USDA Fitness Center provides showers free of charge. Employees may also rent a locker as a non-member for $48 per year. In addition, there are also showers in the basement of the Yates and Whitten Buildings. Overall, the USDA headquarters complex provides employees with all amenities that are necessary to have a solid active commuting program;

- The Rural Development (RD) Work/Life Coordinator reports that Columbus, Ohio is located in an urban area where several employees walk and/or bike to work. Most employees do not find it feasible to bike or walk to the office, either because of the proximity of home and work locations or because there are few incentives;

- Communities throughout the state of Wyoming have rail-to-trail biking/walking paths available; the RD Work/Life Coordinator reports that the RD State Office is located in an urban area within reach of a walking/biking path;

- USDA, APHIS, Wildlife Services (WS) National Wildlife Research Center (NWRC) is a member of the City of Fort Collins ClimateWise program. ClimateWise is a free voluntary program dedicated to helping businesses save money and reduce the carbon emissions. The NWRC partners with businesses annually to support the Bike to Work Day during the summer, and, newly added, winter bike days. NWRC hosts, participating with several USDA employees, one of 30 breakfast stations throughout Fort Collins. Riders are asked to log their mileage. The 2015 NWRC breakfast station logged 75 riders who saved an estimated 40 gallons of gasoline in one day;

- In remote locations with few staff, such as at the Pocatello ID Supply Depot, some employees bike to work continuously through the year except in severe weather; these employees require secure bicycle storage areas and shower facilities; and

- APHIS Riverdale, MD - The APHIS Riverdale building is located very close to a hiking and biking trail; some employees utilize the trail for commuting; this location has secure bicycle storage and a shower.

Moving Forward

USDA continues to fully support employee active commuting initiatives; these help the department to achieve Scope 3 GHG emissions reductions goals, to encourage employee health and well-being and reduce commuting costs and enhancing work/life effectiveness. Planned initiatives for FY 2017 include:

- Encouraging all USDA offices to create formal bicycling communities. Formal bicycling commuting programs need to provide access to lockers, shower facilities and protected space for bike storage;

- Promoting active commuting during certain times of year; for example, from April to September, by increasing the space allotted for bicycling storage at USDA parking lots; and

- Expanding the USDA Running and Walking Club to include bicycle commuters.

III.   Telecommuting and Teleconferencing Expansion

Overview

USDA fully supports the use of telework and teleconferencing to the maximum extent possible. Office workers in urban areas are increasingly teleworking, and the number of those eligible to telework has increased steadily since the baseline year of the Diversity, Recruitment and Work/Life Division Work/Life and Wellness Program study. Commuting GHG emissions have decreased since the baseline year due to increased telework.

Beyond decreasing business travel demand, teleconferencing expands the USDA workforce's ability to communicate and collaborate. USDA's GHG emissions for business ground travel have remained steady since the baseline year, and business air travel has decreased significantly.

Teleworking enables employees to reduce both their carbon footprint and traffic congestion. At the same time, they attain enhanced work/life effectiveness and can balance work/life and family obligations while saving money and fossil fuel. From a management perspective, telework enables offices to minimize disruptions to normal business operations and is a key component in ensuring continuity of operations during an incident. Telework promotes management effectiveness by targeting reductions in management costs related to employee turnover and absenteeism, and reduces real estate costs, transit costs, and environmental impact. The integration of work/life leads to employee satisfaction thereby retaining a more resilient, results-oriented Federal workforce better able to meet agency mission and goals.

The Mobile Work Exchange reports that 76% of the Federal Government uses mobile work devices for work-related tasks. Dedicated teleconference lines have been a standard practice for decades at USDA along with Microsoft Live Meeting and Instant Messenger. The introduction of advanced teleconferencing techniques such as Vidyo, GoToMeeting, and Adobe Connect continues to remove barriers for the teleworker, and to alleviate management concerns regarding effective communication and collaboration.

With the passage of the Telework Enhancement Act of 2010, USDA appointed its first Telework Managing Officer, in December 2010. USDA, since 2011, is creating numerous initiatives to promote telework including:

- Providing telework webinars as employee training resources;

- Administering a USDA Telework Assessment Survey in 2015 and 2016 Department-wide;

- Training Telework Coordinators with guidance on practices and on reporting; and

- Hosting the annual USDA Telework Pledge Week in April with two months of promoting and tracking pledges leading up to Telework Week.

Factors to Consider

At USDA, many positions do not lend themselves to telework, as employees must be on-site to interact directly with the public, to perform laboratory work and/or to perform inspections.

Telecommuting and Teleconferencing Challenges

At USDA, teleworking comes with multiple challenges. The biggest challenge for teleworkers is in the area of information technology (IT), both in implementing state of the art video conferencing IT -- presently mainstream in the private sector -- and in receiving technical support.

It's difficult to operate optimally and to effectively communicate utilizing the state of the art technologies, including the non-verbal component, with a cap on IT software and equipment investment. An additional challenge is, in video conferencing, aligning with partners outside the agency who use the current video technology. Most teleworkers attend meetings by conference call. In receiving IT technical support, for example, updating computer hardware, configuring networks, and incidental troubleshooting are each increasingly difficult when the problem-solver is remote from the telework desk.

Teleworkers may feel isolated or disconnected, and may perceive that relationships are lost and/or that cultural growth is hindered as they miss on-site events, get-togethers or group outings. Many teleworkers believe their career development and promotional potential are damaged due to lack of visibility and their distance from face-to-face meetings. Teleworkers must attain additional skills; for example, leading teleconferences requires different meeting management skills than those required to lead face-to-face meetings.

An additional challenge is that some managers remain concerned that employees are 'out of sight' and wonder 'are they really working?' In transitioning from these concerns and expectations, we train managers to focus on the end product rather than the employees' visibility.

Telecommuting and Teleconferencing Successes

Within the USDA approximately 74% of all employees are telework eligible as of the second quarter of FY 2016; and of the eligible employees, 32% actively participate through a telework agreement.   USDA agency successes and opportunities to expand upon telework and teleconferencing[1], include:

- Rural and urban locations report that most, but not all offices often use video-teleconferencing (VTC) equipment to avoid long commutes. Some employees commute as much as 200 miles round trip. However, this strategy would only be fully effective should all offices have the VTC resource.   Many senior management teams meet monthly using VTC and some State Directors hold all employee staff meetings using VTC to provide updates, new information and to recognize outstanding staff accomplishments;

- All offices have dedicated teleconference phone lines that are used for most staff meetings. These lines are used in conjunction with Adobe Connect when a more detailed process is needed. The daily process of communication is thru such tools as Instant Messenger and email;

- Employees report that teleworking minimizes long commutes and provides them with a more balanced work/life. They can stay on top of work requirements yet flex their schedule to tend to elderly family members, attend doctor appointments and participate in more family activities;

- USDA Telework Program Coordinator reports that Telework enables successful continuation of USDA operations including funding actions during office closures. Telework has allowed numerous employees to relocate and continue working in lieu of retiring and has led to an increased ability to recruit top talent.

USDA's Diversity, Recruitment and Work/Life Division Work/Life and Wellness Program conducted the 2015 Telework Assessment Survey to assess the USDA Telework Program and to identify strategies to make it more responsive to the Department's needs.

The survey asked 44 questions, to effectively capture the attitude of USDA employee respondents, in four areas:

1. Eligibility and participation, frequency of telework, and whether participation coincides with the telework agreement;

2. Mechanics of telework, utilization of communication tools, attitude on virtual meetings, and performance management practices;

3. Supervisory and management promotion of the telework program, negative attitudes about the program, and the existent of any telework-related goals; and

4. Training received, opportunities, and requests.

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[1] USDA agencies reporting include Headquarters, the Animal, Plant and Health Inspection Service, Rural Development, the Food Safety and Inspection Service, the Forest Service and the Natural Resources Conservation Service.

The survey strategically positioned questions to capture the most diverse responses and a wide range of data from non-teleworkers and teleworkers at both supervisory and non-supervisory levels. 13,272 of the Department's almost 90,000 employees responded.

A number of findings follow[2], on the telework program's top strengths and top challenges, and on recommendations for next steps. The findings include these strengths and challenges:
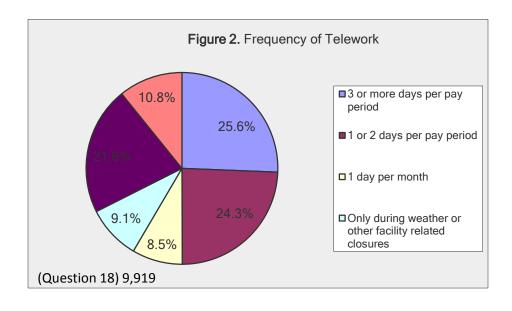
Top Strengths

> **Managers use best practices to encourage Telework.**

The most common method used by managers to encourage telework participation was during discussions with employees regarding eligibility and agreements. Over 55% of managers also reported discussing clear expectations with employees and 31% reported developing a work plan with employees. These and other strategies are encouraged in the "Performance Management" and "Telework 101 for Managers" training course thru AgLearn. Managers reported taking these courses, 34 percent and 66 percent, respectively.

> **Telework participation and frequency is high.**

Telework plays a major role in the reduction of physical space demands, utilities, and transit subsidy dollars. Thirty-eight percent of respondents reported participating in core Telework and 59.2% on an Ad Hoc/situational basis.

A large majority of respondents participate at the level established in their agreements. Almost 50% of respondents with approved agreements reported teleworking at least one day per month. (Refer to Figure 2.)
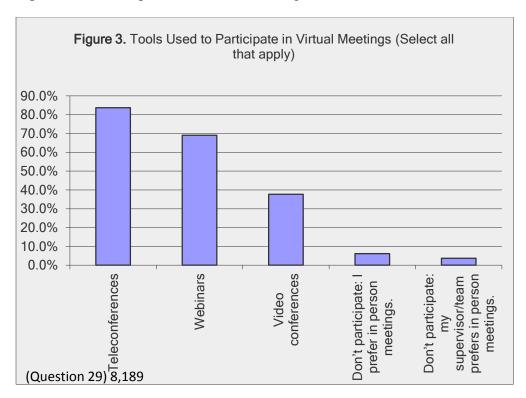

Figure 2. Frequency of Telework

- 3 or more days per pay period — 25.6%
- 1 or 2 days per pay period — 24.3%
- 1 day per month — 8.5%
- Only during weather or other facility related closures — 9.1%
- 21.6%
- 10.8%

(Question 18) 9,919

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[2] Figures shown are from the 2015 Telework Assessment Survey Executive Summary, and enumeration follows its format.

The home is the primary telework location for 97% of core teleworkers. This illustrates that the Department has the potential to realize significant cost savings and reduce the carbon footprint.

> **Communication is not diminished by Telework.**

A large majority of respondents reported using e-mail, cell phone, and landline phone to communicate with supervisors, co-workers, and customers while teleworking. Less than one percent of respondents reported waiting until they were in the office to communicate.

A majority of teleworkers leverage teleconferences and webinars to participate in virtual meetings. Only three point seven percent of respondents reported a reliance on in-person meetings due to supervisor or team preference. (Refer to Figure 3.)

Figure 3. Tools Used to Participate in Virtual Meetings (Select all that apply)

(Question 29) 8,189

Top Challenges

> **Technical issues.**

"Respondents perceive the top barriers to telework to be lack of access to needed files (28.4%), lack of middle management support (22.5%) and lack of appropriate equipment (20.2%). A substantial amount of survey comments referenced remote access to systems as a major barrier to effective telework. Respondents discussed possible ways to improve technology for telework such as the use of dual screens, an alternate method to Citrix security, webmail and increased use of electronic documents and

signatures." [33]

Moving Forward

USDA will continue to fully support the maximum use of telework and teleconferencing. Departmental leadership believes that telework and teleconferencing have many more pros than cons. Continued evaluations include data calls and surveys to identify challenges and successes. Quarterly meetings/training sessions will continue with State/Agency Telework Coordinators to provide updates, report progress and develop goals. Teleconferencing tools are offered to the Telework Program early as pilots and to access effectiveness and ease of use. Effective teleconferencing tools are a crucial element of the successful Telework Program. Planned FY 2017 actions include:

- Continuing hosting the annual USDA Telework Pledge Week; the data extrapolated from the pledges will be used to evaluate the annual reduction in our carbon footprint and identify cost savings. The Department is considering initiating employee surveys about telework, to identify barriers and challenges to fully implementing the Telework Program;

- Training staff responsible to lead telework expansion efforts, on a quarterly basis; holding sessions to provide updates, report progress and develop goals with Agency State, Regional and National Telework Coordinators; and

- Promoting use of additional VTC, Adobe Connect and other teleconferencing tools at locations where they do not exist, with the goal of every location having teleconferencing and virtual meeting capabilities.

IV. Incentivized Carpooling and use of Public Transportation

Overview

USDA actively supports carpooling and public transit commuting, with over fifteen years of success with these transportation modes. Incentives are strong for each, with carpool facilities in place and agency-issued public transit benefits.

Factors to Consider

USDA agency missions are diverse, and many agency missions require a staff presence over a wide geographic area including remote locations. Many USDA agency functions are conducted at field-level facilities, and often USDA staff interact with the public. Locations are often driven by factors beyond USDA's control.

Public Transit Successes

- In recent years, USDA measures a range of 6,000 to 8,000 employees who participate annually in the public transit benefits program. The number of participants vary due to seasonal work

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[3] The quote is an excerpt from the 2015 Telework Assessment Survey by the USDA Diversity, Recruitment and Work/Life Division Work/Life and Wellness Program

schedules. These benefits save USDA employees over 9 million dollars in commuting costs, reduce gasoline consumption and traffic congestion, and reduce USDA Scope 3 GHG emission as well as the employees' carbon footprint;

- The RD Work/Life Coordinator for Ohio reports that some employees use public transportation at their urban location through bus service, and that the transit subsidy gives incentive; and

- The USDA APHIS employees at the Riverdale complex use various modes of mass transit to commute to work[4], including bus, shuttle to light rail service, and heavy rail service.

Public Transit Challenges

At USDA, employees face challenges in using public transit to commute, especially with communications and travel technologies:

- The volume of teleworker virtual traffic sometimes overloads the agency Virtual Private Network (VPN), and the Metro system closing or not functioning properly can create a secondary VPN overload issue. On March 16, 2016, Metro suspended trains for 24 hours which forced some APHIS Riverdale to commute by car from as far away as Pennsylvania and Delaware;

- Service disruptions which impact USDA NCR employees are becoming quite common in the DC Metro area, where many employees commute by public transit: Metro commuters, according to WTOP News on May 6, 2016, face "massive" repairs, shutdowns, and service cuts over the next year. The scheduled Metro track work in the National Capital Region's system between June 4, 2016 and March 2017 is anticipated to impact USDA NCR employees;

- At USDA locations in rural settings, such as in the State of Wyoming, there is little to no traffic congestion; this can contribute to the absence of public transportation and a reliance by commuters on the use of individual vehicles; and

- USDA commuters face inclement weather challenges in Wyoming with precipitation, especially snow and ice, can exacerbate the already imperfect road conditions and lead to commuting difficulties.

Carpooling Successes

The USDA has many locations across the rural U.S. and in urban areas, with many carpooling successes, including:

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[4] A metro bus picks up passengers in front of the APHIS Riverdale complex. It is located about a half mile from a Metro station; the distance and route is walkable. The University of MD provides a free shuttle between APHIS Riverdale and the Greenbelt metro station and Marc Train Station. APHIS has employees commuting from as far away as Pennsylvania and Delaware using the Marc Train and shuttle.

-   A number of USDA employees utilize carpools, according to RD. A non-profit organization assists in finding people to join carpools, and pays for taxi fare if one misses their carpool connection in Ohio. RD reports that many employees use "Ride Share" as a carpooling option in Iowa; and

-   Several groups of APHIS Riverdale employees commute by carpool, including a group of employees who live near one another and regularly carpool; this can be especially helpful in pooling resources to pay a monthly or daily parking fee and to take turns driving. The carpool practice reduces fuel costs as well as greenhouse gas emissions.

Moving Forward

USDA will continue to actively support carpooling and public transit as modes of commuting to the workplace, and to combine these with other modes such as teleconferencing. These initiatives lend themselves to achieving departmental Scope 3 GHG emissions reductions goals, and to reducing employee commuting costs and enhancing work/life effectiveness.